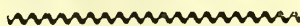


The Height of the Season

FOR

BUTTER COLOURING.



CHEESE COLOURING, OR LIQUID ANNATTO.

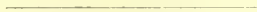
CHEESE RENNET OF SPECIAL STRENGTH.

BUTTER POWDER AND PRESERVER.

ESSENCE OF RENNET, FOR JUNKETS, CURDS AND WHEY,
CHEESE CAKES, &c.



These goods are all attractively got up, and sell well wherever introduced, and are stocked by all the Wholesale Houses, in retail sizes from 6d. to 5s.



Being Manufacturers on a very large scale we are able to treat with all buyers, home or export, for either bottled goods or in bulk. Inquiries should state quantity, and, if for export, what market.



OUR TRADE MARKS ARE:

The "SILVER CHURN," The "BUTTERCUP,"
The "DAFFODIL," The "COWSLIP," and The
"PRIMROSE," and having registered these in England and
Abroad, any infringement of our rights in these will be proceeded
against.

OLDFIELD, PATTINSON & CO.

Wholesale Druggists and Manufacturing Chemists,
17 TODD STREET, MANCHESTER.

Monthly Prices Current forwarded on receipt of printed address.

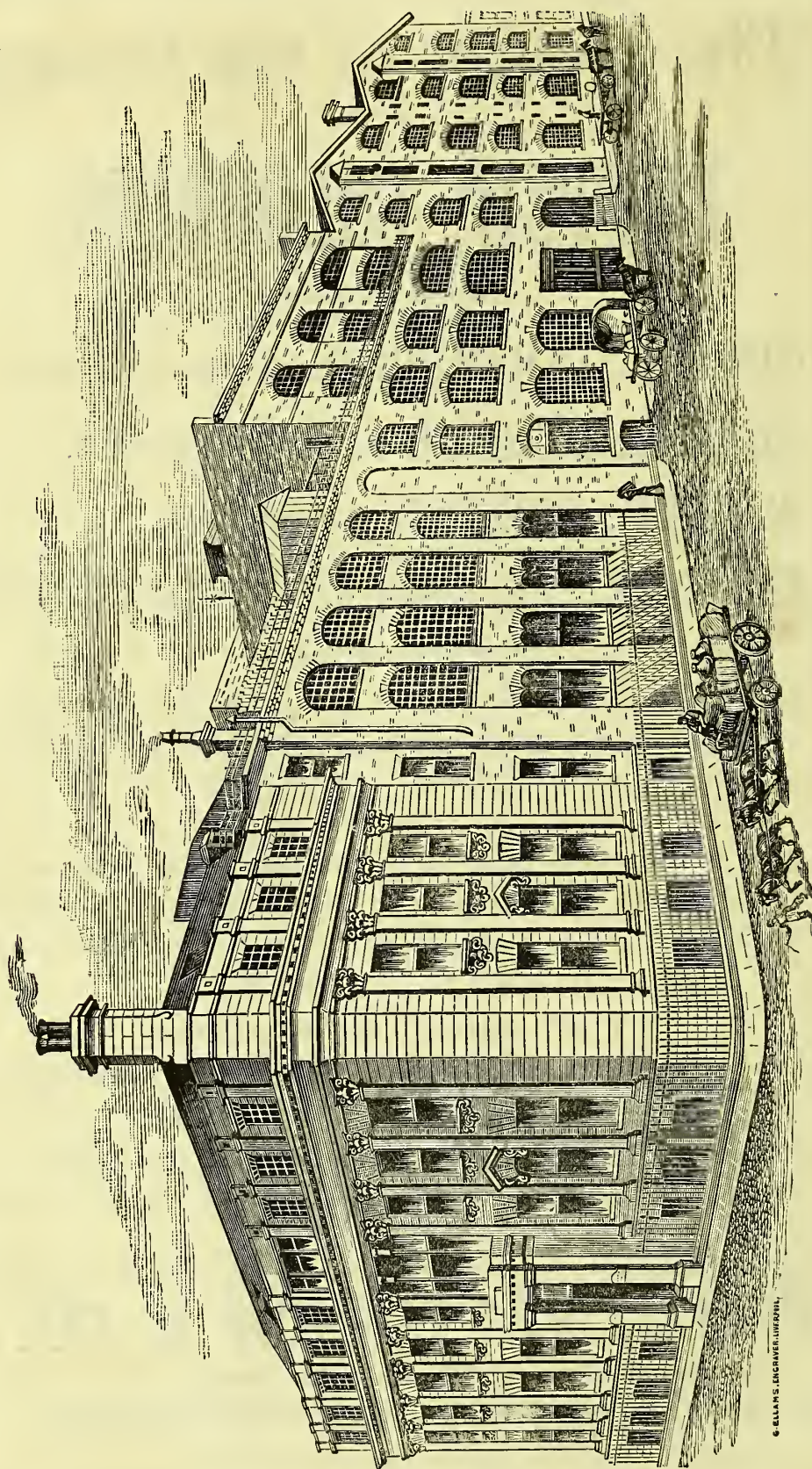
THE
SILVER
CHURN.



THE
SILVER
CHURN.

Important

Notice.



EVANS, SONS & CO., LIVERPOOL.
ENLARGED PREMISES, 56 HANOVER ST., & SEEL ST., LIVERPOOL.

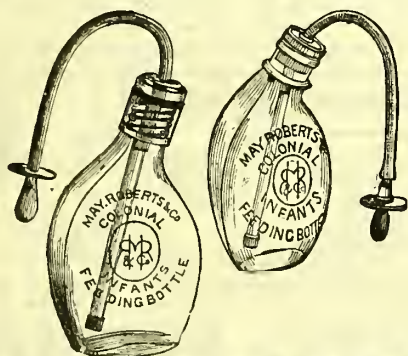
(The part under arrows shows the more recent additions and alterations.)

CAN YOU BUY THEM CHEAPER?

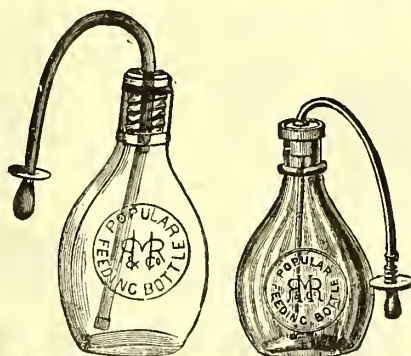
£1 worth or more, 5% disct.

£5 worth or more, 5% disct. & Carriage Paid.

COLONIAL



POPULAR



FEEDING BOTTLES.

If with White Glass Bottles, 2/ gross extra.

	Each in Card Box.	In Boxes of 1 Dozen.	Loose in Cask (free).
Green Glass, Wood Top, White Fittings	Per Gross. 34/	Per Gross. 28/	Per Gross. 23/
Do. do. Black Fittings	37/	31/	26/
Do. Screw Glass, White Fittings	39/	33/	29/
Do. do. Black Fittings	42/	36/	32/

MAY, ROBERTS & CO., LONDON.

Telegraphic Address—"FEEDING BOTTLES LONDON."

PRICE LIST OF DRUGGISTS' SUNDRIES, &c., POST FREE.

ESTABLISHED 1842.

THE SCHOOL OF PHARMACY*Of the Pharmaceutical Society of Great Britain.*

Chemistry, Prof. DUNSTAN, M.A., &c. Practical Chemistry, Prof. ATTFIELD, F.R.S., &c.
 Botany, Prof. GREEN, B.Sc., &c. Practical Pharmacy, Mr. JOSEPH INCE, F.C.S., &c. Materia Medica, Mr. H. G. GREENISH, F.L.S.
FIFTY-FIRST SESSION, 1892-93.

Application for admission to the School, for Prospectuses, or for further information or advice may be made to MR. F. W. SHORT, Secretary to the School, 17 Bloomsbury Square, London, W.C.

**SHEFFIELD COLLEGE
OF PHARMACY.**

PRINCIPALS { R. B. GREAVES.
J. W. J. TURNER.

The Full Course for the January Examination commenced on the 4th October.

The next Short Course will commence on the 21st November. Fee, £4 10s., inclusive. No extras; all apparatus and chemicals free.

Intending Students are advised to make early application for this Course, as there are but few vacancies.

A New Prospectus will be posted to any address on application to—

R. B. GREAVES, F.C.S., Ph.C.,
118 THE MOOR, SHEFFIELD.

YORK & SON**OPTICAL LANTERN**

AND

SLIDE MANUFACTURERS.

The Largest Makers in the World.

67 Lancaster Road, Notting Hill, LONDON, W.

THIRTEEN MEDALS AWARDED FOR EXCELLENCE.

Trade Catalogues & Prices on receipt of Business Card.

**Look!**

We thank our Customers for the patronage so kindly bestowed upon us, and beg to remind them they will find us ever ready to place the

resources of our office at their disposal.
BOWERS BROTHERS, Printers
 89, Blackfriars Road, and
 Canterbury Road, Brixton, S.E.

Important Features.

NEWEST SHADES IN INKS.
 NOVELTIES IN PAPER.
 LONG EXPERIENCE.
 ORIGINAL IDEAS.
 LATEST DESIGNS.
 FAST PRESSES.
 CHEAPNESS.

Listen!

FINE SATISFACTORY.
 APPROPRIATE.
 ATTRACTIVE.
 ARTISTIC.
 QUAIN.
 PLAIN.
 ODD.

PRINTING

WHAT APPEALS MORE PERSUASIVELY?



Write for Estimates & Specimens. Bowers Brothers, Blackfriars, London, S.E.

PHOTOGRAPHIC APPARATUS & REQUISITES

MICROSCOPIC THIN GLASS, SLIDES,
 &c., &c.

WHOLESALE AND RETAIL.**GEO. HOUGHTON & SON, 89 HIGH HOLBORN, LONDON.**

Price List on application. Dealers should enclose Trade Card.

HARRISON'S FEATHERWEIGHT
PERFECTION EYE PRESERVERS & READING SHADES
 (Registered).



Court Journal says of them—"They are a perfect gem of beauty, lightness, and utility."

XYLONITE EYE CAPS
 (Concave). Rights and Lefts.
 Flesh Coloured.

Stop out the Light and Cold without Touching the Eye.

T. H. HARRISON,
 40 Hatton Garden, London, E.C.

O. BEREND & CO.

61 Fore Street, LONDON, E.C.

CHEMIST'S BUNSEN BURNERS

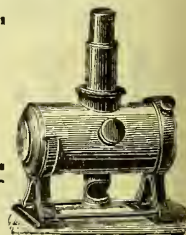
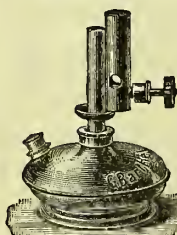
Methylated Spirits and Benzoline.

ABSOLUTE SAFETY.
 EXTRAORDINARY

HEAT.
 GREAT ECONOMY.
 PERFECT

REGULATION.

Direct or of all
 Wholesale Dealers.



HIGH CLASS. **DAVIS'S** LOW PRICE.
DOMESTIC NOW READY.
YEAR BOOK.
1893.] **ILLUSTRATED.**

Contains 32 Pages and handsome wrapper, 6 pages of which for own Specialties, useful Tables, Calendar, Postal Information, and other matter specially compiled for Chemists' distribution.

Eighth year of issue. Best value in the market, and the cheapest.

WRITE for SAMPLES to 201 OLD KENT RD., S.E.

Now **DAVIS'S** Ready.
TOILET 1893.
ALMANAC

PURSE AND POCKET SIZE. 32 pages, in beautiful Illuminated Wrapper. Chemists' own Specialties inserted.

BEST VALUE IN THE TRADE.

Send for } JOHN DAVIS & CO. (Ltd.), Steam Printers,
Samples } 201 OLD KENT ROAD, S.E.

BOOKS FOR THE CHEMIST'S LIBRARY.

- "THE ART OF DISPENSING." Price 3s. 6d. By post, 3s. 10d.
"HANDY BOOK OF MEDICINE-STAMP DUTY." By E. N. ALPE,
of the Solicitor's Department, Somerset House. Price 2s. 6d. By post, 2s. 9d.
"MANUAL OF PHARMACEUTICAL TESTING." By B.S.
PROCTOR, F.I.C. Price 2s. 6d. By post, 2s. 9d.
"VETERINARY COUNTER PRACTICE." Price 3s. 6d. Post
Free, 3s. 9d.

Published at the Offices of THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C.; and from all Wholesale Houses.

JUST PUBLISHED. 200 pp., Crown 8vo. 3s. 6d.

INDIGESTION

A Manual of the Diagnosis and Modern Treatment of the different varieties of Dyspepsia.

By GEO. HERSCHELL, M.D., LOND.

"Any work of this character must stand comparison with a number of able monographs either in English, French, or German. We think Dr. Herschell's book will compare favourably with any of these."—*Therapeutic Gazette*, Jan., 1892.
London: BAILLIÈRE, TINDALL & COX.

THE "ECONOMIC SERIES"

Of Twelve Botanical Slides, illustrating the Arrangement of the Elementary Tissues.

Specially arranged for the use of Students in Botany and Materia Medica, and designed for instruction and reference. Each Slide is marked with its characteristic feature, so that the Student may know what to look for in his histological practice.
10s. 6d. the Set in Case complete. Free by Post.

G. T. W. NEWSHOLME, Sheffield.

JUST PUBLISHED.

"THE PRINCIPAL STARCHES USED AS FOOD"

Illustrated by Photo-Micrography, with a short description of their Origin and Characters.

By W. GRIFFITHS, MARKET PLACE, CIRENCESTER.

Price 5/- Will be forwarded by post on receipt of P.O. sent to the above address.

LONDON HOMOEOPATHIC HOSPITAL AND MEDICAL SCHOOL, GREAT ORMOND STREET, BLOOMSBURY, W.C.

President—THE LORD Ebury.

Contains 90 Beds, and being entirely supported by Voluntary Contributions, Donations and Annual Subscriptions are earnestly solicited. The Hospital is always open to the inspection of visitors, and Clinical Instruction is given in the Wards and Out-patient Department to Medical Students and Practitioners. It possesses a valuable Library of Homeopathic Publications, which Medical Men are invited to study. They are also invited to visit the Dispensary. The In-patients number over 700 annually; the Out-patients nearly 9,000 annually. The number of Patients treated since the inauguration in 1849 exceeds 215,000. It has a staff of Nurses for Ward Nursing and Nursing Invalids at their residences.

G. A. CROSSL, Secretary-Superintendent

WESTMINSTER COLLEGE

TRINITY SQUARE, BOROUGH, LONDON, S.E.

The next Course will be commenced on October 25th.

Students intending to commence then should enter their names at once.

FEE:—To the January Examination, £8 8s. April, £12 12s.; until Qualified, £15 15s. This fee includes use of books and apparatus—NO EXTRAS.

EVENING CLASSES

Are held on Tuesday, Wednesday, and Thursday; fees and full particulars on application.

THREE YEARS' FREE TUITION.

WILLS' UNIVERSAL POSTAL SYSTEM.

"Those who cannot attend a school of pharmacy will find 'Wills' Universal Postal System' train them in a way they should go."—*Chemist and Druggist*.

"Mr. Wills, of Westminster College, one of our most successful tutors, extends him a helping hand, leaving it simply his own fault, and deserving it, if he blindly labours on in ignorant darkness."—*Magazine of Chemistry*.

For Prospectus and full particulars apply to

E. WALDEN, Secretary.



SACHET ALMANACK, printed 32 pages.
 PRESENTATION " " 32 "
 THE COURT " " 36 "
 THE NEW " 7×4 $\frac{3}{4}$ " 36 "

Covers printed in 5 Colours.

HANGING CALENDAR, in Colours.

HANGING CARD CALENDAR, in 2 Colours.

SINGLE CARD CALENDARS.

FOLDING CARD CALENDARS.

PURSE ALMANACKS.

12 Designs to select
from.

Specimens and Prices Now Ready.

*Sent Post free on receipt of Business
Card.*

H. SILVERLOCK,

92, BLACKFRIARS ROAD, LONDON, S.E.

FORD, SHAPLAND & CO.

CHEMISTS' AND GENERAL PRINTERS, LITHOGRAPHERS, ENGRAVERS, ETC.
 6 GREAT TURNSTILE, HIGH HOLBORN, LONDON, W.C.

DON'T ORDER ALMANACKS FOR 1893

Until you have seen our Samples, as we have produced

TWO VERY CHOICE DESIGNS for the cover of our **POCKET ALMANACK & CARD CALENDAR.**
ALSO BOOK ALMANACK AND PURSE ALMANACK AND CARD CALENDARS.

Write for Specimens and Prices.

PICTORIAL COUNTER BILLS, Printed on assorted Tinted Paper.

WRITE FOR SAMPLES AND PRICES.

ORDINARY COUNTER BILLS,

On GOOD WHITE PAPER, at LOWEST PRICES ever offered.

10,000 CROWN OCTAVO BILLS (7 $\frac{1}{2}$ in. by 5 in.) 11/6
10,000 DEMY OCTAVO BILLS (9 in. by 5 $\frac{1}{2}$ in.) 17/-

All other Sizes at equally Low Rates. Specimens and Prices on application.

Price Lists, Pamphlets, Circulars, Billheads, Memorandums, Cards, and all kinds of Printing and Stationery required by Chemists, at most Moderate Prices.

AGENTS for REGISTRATION of TRADE MARKS.



PREMIER
VINOLIA SOAP.

Awarded the Medal
of the Sanitary In-
stitute of Great
Britain (1892).

Vinolia

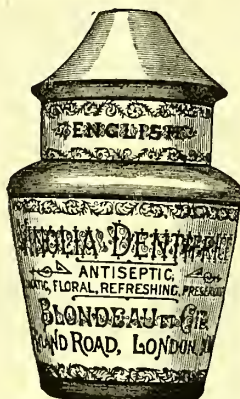


VESTAL
VINOLIA SOAP.

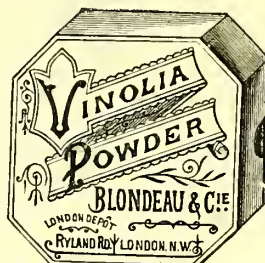
"VINOLIA" SOAP.
Premier 4d., Floral
6d., Balsamic (Medi-
cal) 8d., Toilet (Oto)
10d., and Vestal 2 6
per tablet.



For Itching, Eczema, Rough-
ness, &c., 1/9, 3/6, and 6/-



Contains no salicylic or
mineral acids or bleaching
corrosive alkalies.
English 2/6, American 1/6.



Soothing, Soluble, Safe.
For the Toilet, Nursery, &c.
1/9, 3/6, and 6/-



creamy and
Demulcent.
Toilet 1/-
Vestal 2/6.



New Perfume
"Jequilla," 3/6.



Delicate, Homogeneous and
Safe.
In antique vase, 5/6.



New Perfume
"Marequil," 3/6.



Superfatted and
Demulcent.
Toilet 1/6,
Vestal 2/6.



the complexion.
elegant vase, 7/6.



Yields a most soothing, sub-
stantial lather.
Toilet 2/-, Vestal 4/5.



New Perfume,
"Vinolia Bouquet,"
3/6.



For the skin in health and
disease.
1/9, 3/6, and 6/-



A Coraline
Emollient
for the lips,
6d. and 1/-

BLONDEAU ET CIE., RYLAND ROAD, LONDON, N.W.
American Depôt: 73-77 Watts Street, NEW YORK.

EXCHANGE COLUMN.

FOR DISPOSAL.

Drugs and Chemicals.

Potass citras, 2 lbs., pulv. Ipecac., $\frac{1}{2}$ lb.; 7s. lot, carriage paid. S. Turner, Hipperholme, Halifax.

Educational.

Quain's "Anatomy," 2 vols., published at 32s., price 12s.; good condition. McEibbon, Wath-on-Dearne.

"Dispensary of United States," latest edition, 1891, substantially bound in 2 vols., 32s., carriage paid. Sleigh, 21 Lichfield Street, Walsall.

Maclaren's "Atlas of Venereal Diseases"; ten 6s. parts, with coloured plates, quite new and clean; offers, cash, show-case, or goods. Jepson, Chemist, Sheffield.

For disposal, monocular microscope, been used only four months; Pereira's "Selecta & Prescripta"; Wills's "Pharmacy," latest edition; Bloxham's "Chemistry"; Wills's materia medica cabinet; Wills's Minor apparatus; all new; half-price. "Omega," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

Shop Fittings.

Second-hand counter-cases, 4 ft. 60s., 5 ft. 75s., 6 ft. 90s., 7 ft. 110s., 8 ft. 120s., 10 ft. 170s. Natali, 40 Gray's Inn Road, London, W.C.

Second-hand wall-cases, 4 ft. 65s., 6 ft. 95s., 8 ft. 130s., and 10 ft.; also several smaller sizes. Natali, 40 Gray's Inn Road, London, W.C.

Second-hand mahogany dispensing-screen, glass tablets and plate-glass doors, 4 ft. 70s., 5 ft. 85s., 6 ft. 5l. Natali, 40 Gray's Inn Road, London, W.C.

Second-hand mahogany counters, plate-glass cases in front, 6 ft. 5l., 9 ft. 8l., 10 ft. 9l., 12 ft. 10l. Natali, 40 Gray's Inn Road, London, W.C.

Three 4-gall. pear-shaped carboys, cheap. Particulars to 182/2, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

Show-case, suitable for chemist and druggist, about 5 ft. x 6 ft. x 8 ft. high, to be sold, a bargain. Can be seen at Geo. Engel's, 18 Castle Street, Falcon Square, E.C.

Six doz. $\frac{3}{4}$ oz. cold-cream pots, burnt-in labels, 8s. 6d.; 1 doz. 1-oz. ditto, 1s.; $\frac{3}{4}$ doz. 3-oz. covered pots, 1s. 3d.; 1 doz. 2-oz. ditto, 1s. 3d.; 2 doz 1-oz. ditto, 2s.; 2 $\frac{1}{2}$ doz. 2-oz. w.m. powder-bottles, with metal sprinklers, 3s. Younger, Brampton, Cumberland.

Job lines in pear-shape carboys, 2 gall. 5s., 3 gall. 7s. 6d., 6 gall. 15s., 8 gall. 22s.; also a quantity of shop-rounds, syrups, mortars, ointment-jars, glass shelving, and various useful utensils; clearing out; half-price. Natali, 40 Gray's Inn Road, Holborn, London, W.C.

Chemists' shop-fittings, second-hand, in first-class condition, 12-ft. counter, 4l. 4s.; 6-ft. dispensing-screen, 5l.; range of drawers, with shelves, lockers, and cornio, 12-ft. long, 12l. 10s.; and a lot of other goods equally cheap. Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

Miscellaneous.

Apparatus for making pessaries, bougies, capsules, compressed pellets. Bowness, Workington.

Berkfeld house filter, in tinned copper, perfect in action, price 30s.; list price, 52s. 6d. Sutcliffe, Chemist, Burton.

"Chemist and Druggist Diaries," '77 to '92; 5 doz. 6d. McMaster's annatto. Offers to R. Lister, Chemist, Leeds.

Twelve 1l., 12 2s. 6d., 3 5s. Austin's porous disinfectors; 1l. 13s. each. 182/4, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

Gardner's rapid sifting and mixing machine, nearly new; for sale cheap. Samuel Gill, Westtown, Dewsbury.

Chamomile plants, 5,000 for disposal; grow in any kind of soil; flower twice annually; 250 for 12s. 6d. Jones, Pearnthw, Bryngwran, Valley, Anglesea.

WANTED.

Two dozen old stock-bottles, 4 lb., metal caps. Blakemore, Chemist, Smethwick.

Muter's "Practical Analysis"; good condition, cheap. "Alpha," 5 Yarbrough Street, Manchester.

Allen's "Commercial Organic Analysis," vols. i. and ii. Tilley, 131 Albert Road, Middlesborough.

Wireline socks or address of maker. 181/34, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

Wills' books for the Minor. 182/32, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

The Chemist and Druggist for April 2 and 30, 1892; 4d. each offered by the Publisher of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WALKER, TROKE & CO.

WHOLESALE DRUGGISTS,

65 Bath Street, City Road,

LONDON, E.C.

QUOTATIONS & SAMPLES FREE ON APPLICATION.



SOLE MAKERS OF

**GABRIEL & TROKE'S
GELATINE CAPSULED
HORSEBALLS**

Alterative, Condition, Cordial, Cough,
Diuretic, Fever, Phlegm, Worm, Quinine
Tonic Balls (Registered 81,291).

WHITE, FAIRCHILD & CO.

ESTABLISHED 1847.

Offices—80 GREAT TOWER STREET, E.C. Mills—WHITECHAPEL, E.

Speciality—CANISTER COFFEES.

These Coffees have been before the Public for nearly 50 years, and are the very best of their kind.

CHAS. SOUTHWELL & CO.

SOLE MAKERS OF THE

EXCELSIOR TABLE JELLIES

In Packets of
half-pint, pint, and
quart, costing
less than one-third
of the ordinary
Bottled Jellies.



BLACK CURRANT
ORANGE
LEMON
CALFSFOOT
VANILLA
NOYAU
CHERRY
STRAWBERRY
RASPBERRY
FINE APPLE

PRICE LIST ON APPLICATION.

CHAS. SOUTHWELL & CO.

WHOLESALE AND EXPORT CONFECTIONERS,

DOCKHEAD, LONDON, S.E.

10

SUGAR OF MILK

(SYSTEM LANGEN). 1

Highly recommended by authorities. The
only make of perfect purity in all respects.

AGENTS—

BURROUGHS BROS.,
66 Basinghall St., London, E.C.



HOLLOWAY'S PILLS & OINTMENT

Have the Largest Sale of any Medicine in the World.

MANUFACTURED ONLY AT

Professor HOLLOWAY'S Establishment,
78 New Oxford St. (late 533 Oxford St.), London,
And sold at 1s. 1 $\frac{1}{2}$ d., 2s. 9d., 4s. 6 $\frac{1}{2}$ d., 11s., 22s., and 35s. each Box or Pot.
Chemists and Druggists selling "Holloway's Pills and Ointment" can
on application to the above address, or to the Wholesale House with whom
they deal, be supplied free of charge with Handbills and Posters with their
name and address printed at foot.
Wholesale Terms see List "Proprietary Articles" in most Price Currents.

NEW SEASON'S GOODS.

Send for our Quotations if you are in the market for

CAMOMILE FLOWERS, New 1st and 2nd Pickings.

DANDELION ROOT, Fine English.

HONEY, Jamaica, Chilian, &c.

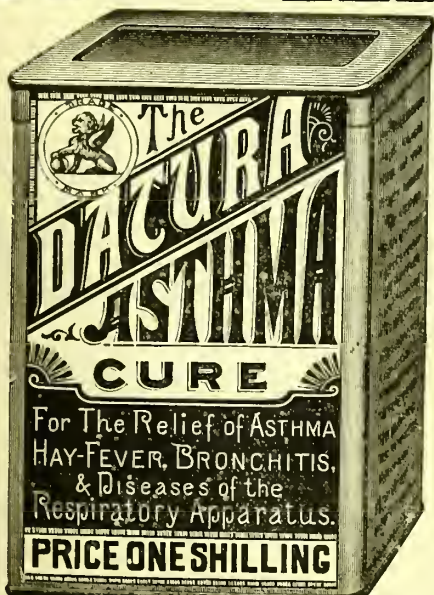
POPPY HEADS, Large and Medium.

SENEGA ROOT.

ALL OTHER NEW DRUGS AT LOWEST PRICES.

POTTER & CLARKE, WHOLESALE BOTANIC DRUGGISTS, **ARTILLERY LANE, E.**
5, 6 & 7 Raven Row,

THE "DATURA" ASTHMA CURE.



A Compound Powder for Inhaling Purposes.

The "Datura" Asthma Cure is acknowledged by all who have tried it to be invaluable. It affords speedy relief in the severe paroxysms of Asthma, and will be found of great service in the treatment of Bronchitis, Whooping Cough, Croup, &c.

Copy of Testimonial sent to Mr. B. J. Wilkinson, Chemist, 7 Middleton Road, Kingsland, Shrubland Grove, Dalston, 16/9/91.

DEAR SIR.—Will you allow me to testify to the value of the "Datura" Asthma Cure? I have been for years a great sufferer from Asthma, and, after trying most of the advertised remedies for the relief and cure of this distressing complaint, I can honestly say that from none have I experienced such immediate relief as from the above remedy.

I may say that I have tried a similar powder, which cost me just treble the money, and it has not been anything like so effectual in stopping the attacks of Asthma as the "Datura" Asthma Cure.

Yours faithfully,

R. B.

Copy of Testimonial sent to Mr. J. Burt, Chemist, Worthing.

17 Alexandra Road, Finsbury Park, London, N., June 29, 1891.

DEAR SIR.—Kindly send me by return a tin of your "Datura" Asthma Cure; enclosed P.O. for 1/6 to cover postage.

My little boy, aged nine years, finds it the greatest relief in most severe attacks of Asthma. I bought a tin last summer while staying at Worthing.

Believe me, truly yours,

A. B. PETERSEN.

Handsomely Packed in Tins to Retail at 1/. Price 8/ per doz.

WRITE for PAMPHLETS, TESTIMONIALS, SHOW CARDS, &c.

POTTER & CLARKE, WHOLESALE BOTANIC DRUGGISTS, **ARTILLERY LANE, E.**
5, 6 & 7 Raven Row,

SYPHONS • SELTZOGENES



Messrs. J. BARRE JOHNSTONE & CO., 20 Loftus St., Sydney, N.S.W.,
Agents for New South Wales, Queensland, and New Zealand.

SODAWATER MACHINERY

AND APPLIANCES

BRATBY & HINCHLIFFE LTD

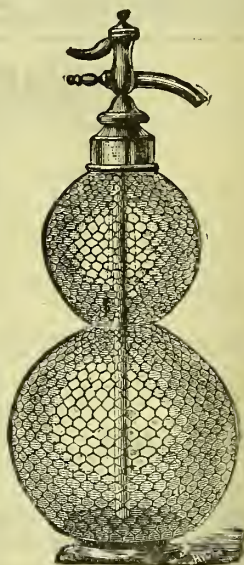
ANCOATS 146 MINORIES

MANCHESTER & LONDON EC

81 ROBERTSON STREET, GLASGOW.

Messrs. NOYES BROS., 43 Queen Street, Melbourne, Victoria,
Agents for Victoria, South and West Australia, and Tasmania.

All our Seltzogenes are manufactured on the well-known "Fevre" System, and each one is thoroughly tested before leaving the works.



PRICES.

SYPHONS ... 1/6 1/8 and 1/10 each.

SELTZOGENES.

1	2	3	4	5	8 pint.
5/6	6/2	7/	8/	9/11	15/6 each.

Including two funnels and stopper for charging.

NATURAL MINERAL WATERS

Packing
Free.

INGRAM & ROYLE,

Packing
Free.

LONDON—52 Farringdon St., E.C. **LIVERPOOL**—19 South John Street.

VICHY

SOLE IMPORTERS OF

(STATE SPRINGS)

VICHY

ESCLAP, CARLSBAD, CARLSBAD SALTS, LA-BOUREOLE, ROSBACH, VALS, &c., &c.

NAME.	Per Dozen.		Original Packages.				NAME.	Per Dozen.		Original Packages.			
	Bots.	½ Bots.	Bottles.	½ Bottles.				Bots.	½ Bots.	Bottles.	½ Bottles.		
Esclap	15/	12/	25	30/	50	50/	Levico .. .. .	..	15/	..	..	..	..
Apollinaris	6/3	5/	50	50	25	100	39/	12/	8/	40	36/	40	25/
Bourboule (La)	11/	..	50	42/	..	..	Rosdorf	6/	..	50	25/	..	..
Carlsbad	12/	..	50	46/	..	..	Rosbach	6/	5/	50	24/	100	36/
Condal .. .. .	..	14/	..	..	50	56/	Royat	9/	..	50	34/	..	..
Contrexeville	9/	..	50	35/	..	..	Rubinat	15/	9/	25	30/	50	36/
Flitwick	24/	11/	..	..	..	..	St. Galmier	6/	..	50	22/	..	..
Franz-Josef .. .. .	..	15/	..	..	50	42/	St. Marco	11/	..	50	42/	50	..
Friedrichshall .. .. .	..	10/	25	25/	50	40/	Selters	6/	4/6	50	24/	..	17/
Hunyadi-Janos	13/	13/	25	30/	50	50/	Vals	8/6	..	50	33/	50	..
Johannis-Brunnen	6/	4/6	50	22/	100	35/	Vichy (State Springs)	8/6	7/6	50	33/	..	29/
Kronenquelle	10/	..	50	40/	..	..	"Celestins," "Grande-Grille," &c.	..	..	..	..	..	..

CARRIAGE PAID to any **RAILWAY STATION** in the **UNITED KINGDOM.**

DETAILED PRICE LIST AND PAMPHLET ON APPLICATION.

SODA WATER MAKING

Foster's Patent.

WITH
LIQUEFIED CARBONIC ACID GAS.

THE No. 1 "COMPACT" MACHINE

Is specially designed for Chemists and Hospitals, and can be used for either Syphon, Ball-stoppered, Cork, or Screw-stoppered Bottles.

Producing capacity, by hand power, 60 dozens per hour.

PRICE £60.

Or, if fitted for steam power, 120 dozens per hour, with an extra filling machine.

THE No. 2 "COMPACT" MACHINE

(AS SHOWN)

Made on the same principle, but smaller in its capacity.

Producing capacity, by hand, 30 dozens per hour.

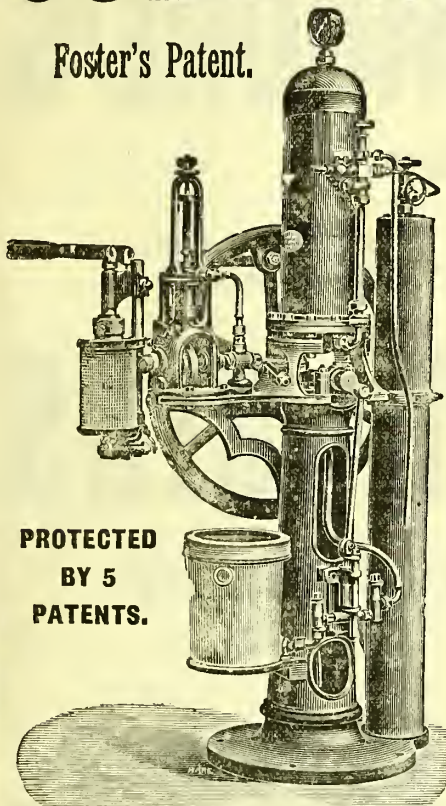
PRICE £48.

Or, if fitted for steam, 60 dozens per hour, with an extra filling machine.

Iron Vessel containing an average of } 10s.
28 lbs. by weight of Liquefied Gas } each.

And has sufficient Gas to manufacture about 18 gross of highly-charged Soda Water (10-oz. Bottles), or double the quantity of splits.

These Machines occupy little space, and are ready for use immediately! They require no fixing! Are self-contained and produce soda water, lemonade, &c., of the highest class and greatest purity.



PROTECTED
BY 5
PATENTS.

The No. 2 Compact Soda Water Machine.

THE PORTABLE CYLINDER

For Supplying the Fountains,

As here shown, is charged with plain Filtered Water while on the Rocker; the gas from the vessel is then slowly turned on, and the copper cylinder rocked backwards and forwards sharply so as to agitate or mix the water and gas together. When charged to the required pressure (about 110 lbs., shown by the pressure-gauge), it can be removed and placed under the counter and attached to the Fountain.

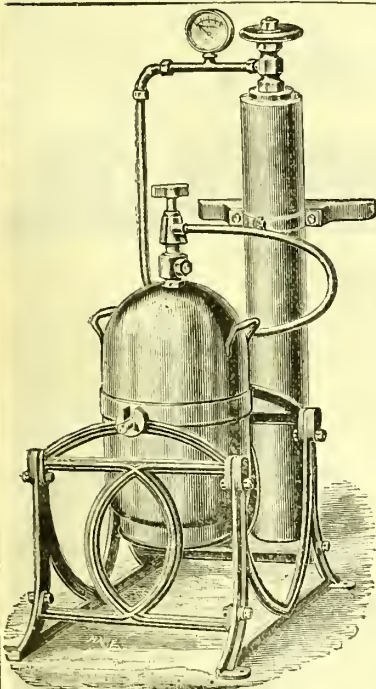
PRICES.

Six-Gallon Tinned Copper Cylinder, £5 10 0.

Cast-iron Rocker, £1 2 6.

Flexible Pipe, Pressure-gauge, Safety-valve, and Connections, £3 3 0.

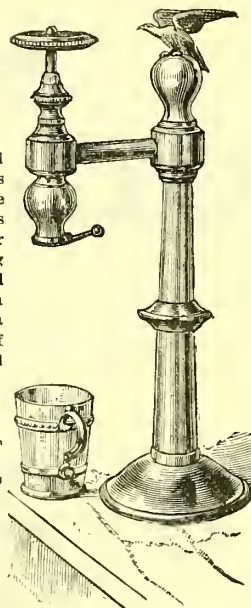
N.B.—To avoid the waste of gas, and also to keep up the pressure, this Cylinder can be fitted with a pump for pumping the water in at the screw of rocking arm, at a cost of £3 8s. extra.



COUNTER FOUNTAINS

For Syrup Drinks.

A small sharp stream of Aërated Water can be drawn from this Fountain, which, when syrup is taken, is absolutely necessary, so as to mix up the syrup with the water first. Afterwards, by pressing edge of glass against the small lever at the side, a large stream of water flows as in emptying a bottle of soda water. It is of very solid construction and thickly plated.



For more elaborate Counter Fountains in Marble, &c., see "C" Catalogue.

Price, thickly plated, £4 7 6.

FOR CATALOGUE AND FULL PARTICULARS
APPLY TO

BARNETT & FOSTER. "Niagara" Works, 26th Eagle Wharf Road, **LONDON, N.**

POTTER & MOORE'S

BLACK AND WHITE

MITCHAM

PEPPERMINT OILS

NEW CROP (1892) NOW READY.

ALSO

OIL LAVENDER,

MITCHAM,

OIL CAMOMILE,

MITCHAM.

WRITE FOR PARTICULARS AND PRICES TO

W. J. BUSH & CO.

(Proprietors of Potter & Moore),

18 ARTILLERY LANE, LONDON

TO THE
CHEMISTS & DRUGGISTS
OF
GREAT BRITAIN.

TELEGRAPHIC ADDRESS: *St. George's, Middle St.*
COLEMAN, *NORWICH,*
GEORGE'S, NORWICH. *December, 1887.*

The Excise Authorities having created a difficulty as to the sale of Medicated Wine containing a certain percentage of alcohol, we obtained in January last, from the Inland Revenue Authorities, permission to sell our WINCARNIS,* or Liebig's Extract of Meat and Malt Wine, **WITH QUININE**, without a Wine Licence, and many Chemists not holding a Wine Licence have sold considerable quantities. In order further to meet the requirements of the trade, we have introduced a Liebig's Extract of Meat and Malt Wine, **NON-Alcoholic**, made from the juice of the Grape, Liebig's Extract of Meat, and Extract of Malt. This also can be **SOLD WITHOUT A WINE LICENCE**. Your orders will oblige either direct or through the Wholesale Houses.

Yours obediently,

COLEMAN & CO., LIMITED.

*N.B.—The Wine is sold in Bottles, 2/9 and 4/6 each.
Trade prices on application.*

P.S.—Where the Magistrate's Certificate is not held we are willing to pay the **entire cost of a Retail Certificate** (the holder of which can sell any kind of Wines) if an **assorted order of 6 dozen** is sent us of any of our preparations. List on application. Our WINCARNIS,* or Liebig's Extract of Meat and Malt Wine **WITHOUT QUININE** commands a very large sale, and is recommended by over 2,000 medical men who have sent us testimonials in its favour.

SOLE MANUFACTURERS—

COLEMAN & CO., LIMITED,
ST. GEORGE'S, NORWICH,
AND 3 NEW LONDON STREET, LONDON, E.C.

* WINCARNIS is a NEW NAME, registered to prevent fraudulent imitations.

LIPTON'S TEAS.

DIRECT FROM THE TEA GARDEN TO THE TEAPOT.

NO MIDDLEMEN'S PROFITS TO PAY.

RICH, PURE, and FRAGRANT. 1s. and 1s. 4d. per lb.

THE FINEST TEA THE WORLD CAN PRODUCE.

1s. 7d. per lb. No higher price. 5 lbs., 7 lbs., 10 lbs., and 20 lbs. packed in patent fancy airtight canisters without extra charge.

SPECIAL NOTICE.

DELIVERED CARRIAGE PAID for an extra 1d. per lb. to any address in Great Britain on orders of 5 lbs. and upwards. Samples sent free on application.

A GUARANTEE: Money returned in full if Tea does not give perfect satisfaction in every way.

LIPTON

TEA AND COFFEE PLANTER, CEYLON.

LONDON BRANCHES:—

Angel House, Islington, N.: 19 High Street, Kingsland; 203 Old Street, E.C.; 240 and 242 Edgware Road, W.; 68 Westbourne Grove, W.; 87 Christ Street, Poplar; 417 Brixton Road, S.W.; 321 Walworth Road, S.E.; 98 Rye Lane, Peckham; 18 St. John's Road, Clapham Junction; 13 High Street, Deptford; 144 Trafalgar Road, East Greenwich; High Road (adjoining the Plough Inn), Tottenham; 245 High Street, Camden Town, N.W.; 128 Lambeth Walk; 18 and 20 Stratton Ground, Westminster; 233 Wandsworth Road; 11 Seven Sisters Road; 3 and 4 Citadel Buildings, High Street, Walthamstow; High Street, Harlesden, Willesden Junction; 151 King Street, Hammersmith; 233 North End Road, Fulham; 44 North End, Croydon; Angel Lane, Stratford; 11 Chapel Street, Somers Town; 132 High Street, Stoke Newington; 6 Little Pulteney Street, Soho; 63 New Cut, Lambeth; 1 Hare Street, Woolwich; 143 Salmon's Lane, Limehouse; 284 Barking Road, Canning Town. Branches in all principal towns of the kingdom.

A WONDERFUL SUCCESS!!

NON-INTOXICATING BEER

Made from MASON'S Original

EXTRACT of HERBS

(REGISTERED.)

Composed of Yarrow, Dandelion, Comfrey, & Horehound.
ENLARGEMENT OF SIZE.

A Sixpenny Bottle makes **EIGHT GALLONS** of
HERB or BOTANIC BEER

A NON-INTOXICATING BEVERAGE

Full of Body and Flavour, with a Creamy Head like Bottled Ale, the most perfect substitute for Alcoholic Drinks ever discovered, for either Summer or Winter.

BEWARE of mean and fraudulent imitations.

BEWARE of others copying our title.

MASON'S is the original and only genuine.

MASON'S is a Special Compound entirely from Herbs.

NO OTHER EXTRACT MAKES BEER LIKE IT

Sold in Bottles at 6d., 1/-, & 2/- each, with directions.

MASON'S WINE ESSENCES

Make Temperance Wines in a few minutes.

Ginger, Orange, Lemon, Raspberry, Black Currant, &c.

These are having a very large sale now, and are extensively advertised.

Sold in Bottles, at 6d., 1s., and 2s. each.

Quotations on Application.

SOLE INVENTORS AND MANUFACTURERS: **NEWBALL & MASON,**
Manufacturing Chemists and Botanic Druggists, NOTTINGHAM.

"HEALTH" says:—

"By far the Best and Purest."

"SOLAZZI."

This is the Purest Liquorice Juice obtainable; it is a guaranteed Specific—in fact, Nature's Own Remedy—for Winter Coughs, Colds, and all Chest Affections.

Chemists should stock and push this article, as a safe and effective remedy, provided by kindly Nature—in preference to Patent medicines, which, in these days, yield only the barest profit. To be had, with Show Cards and Handbills, of

ALL WHOLESALE HOUSES.

"THE CHEMIST AND DRUGGIST"

says:—

"The Most Esteemed of All."

EIGHT PRIZE MEDALS AWARDED.

GOODALL'S HOUSEHOLD SPECIALITIES.

YORKSHIRE RELISH.

Most Delicious Sauce in the World. Bottles, 6d., 1s., & 2s. each.

GOODALL'S BAKING POWDER.

The Best in the World. 1d. Packets; 6d., 1s., 2s., and 5s. Tins.

GOODALL'S EGG POWDER.

One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s., and 5s. Tins.

GOODALL'S CUSTARD POWDER.

Delicious Custards without Eggs. In Boxes, 2d., 6d., & 1s. each.

GOODALL'S BLANCMANGE POWDER

Delicious Blancmange in a Few Minutes. Boxes, 6d. and 1s. each.

GOODALL'S QUININE WINE, B P.

Best Tonic yet Introduced. Bottles, 6d., 1s., and 2s. each

GOODALL'S GINGER-BEER POWDER.

Makes the Best Ginger-Beer. Packets, 3d. and 6d.

GOODALL'S BRUNSWICK BLACK.

For Painting Stoves, Grates, Iron, Tin, &c. 6d. & 1s. Bottles.

GOODALL'S LAVENDER WATER.

A Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

GOODALL'S PLATE POWDER.

For Polishing and Cleaning all Metals. Boxes, 6d., 1s., and 2s.

GOODALL'S JELLY SQUARES.

Make a Delicious and Nutritious Jelly. In $\frac{1}{2}$ -pint, 1-pint and Quart Boxes, 3d., 6d., and 1s. each.

PROPRIETORS—GOODALL, BACKHOUSE & CO., LEEDS.

PATENT MEDICINES AND

DRUGGISTS' SUNDRIES.

Monthly Price List of Patent Medicines, Druggists' Sundries, &c., will be sent post free on application to

GOODALL, BACKHOUSE & CO., LEEDS.



ROBINSON'S LIEBIG'S BEEF WINE.

Composed of Liebig's Extract of Beef, Extract of Malt,
and sound Port Wine.

REPORT ON BEEF WINES.

From the results of my Analyses of various Beef Wines I have had occasion to examine, none have equalled as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. ROBINSON, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.

WILLIAM ELBORNE, F.C.S., F.L.S.,
Lecturer on Materia Medica in the Owens College, Manchester (Victoria University).
December 15, 1888.

ROBINSON'S ORANGE WINE.

Specially prepared for Quinine Wine, does not deposit, will keep good in any climate, and well adapted for Export Trade. Supplied in Casks containing 9, 18, 30, 60, or 120 Gallons. Terms on application. [2]

PHARMACEUTICAL SHERRY WINE.

This Wine is well adapted for Pharmaceutical Preparations, and is the strength ordered by the B.P. Price, in 6-Gallon Casks, 5/6 per gallon; in 2-Gallon Jars, 6/- per gallon, carriage paid. Casks charged 7/6, Jars 2/6, and allowed if returned. Cash or satisfactory reference to accompany order.

B. ROBINSON, Distiller and Brewer of British Wines, Church St., Pendleton, Manchester.

ROWNTREE'S

The "MEDICAL PRESS AND CIRCULAR"—

"Certainly this preparation is of delicate flavour . . . It is perfectly soluble . . . the small quantity required for the immediate production of a cup of excellent cocoa will ensure for this 'Elect Extract' a favourable reception at the hands of persons of weak digestion, and all who prefer this wholesome beverage to tea and coffee."

The "BRITISH MEDICAL JOURNAL" says:—

"Rowntree's Cocoa Extract is one of the best. Its flavour and aroma are good. Cocoa thus prepared is one of the most digestible articles of food."

YORK, ENGLAND.

PURE ORANGE WINE

(VINUM AURANTII, B.P.), prepared in strict accordance with the Formula of the British Pharmacopœia.

MOST SUITABLE BASIS FOR QUININE AND OTHER MEDICATED WINES.

A. MILLAR & CO., DUBLIN; and 47 MARK LANE, LONDON, E.C.

Or of H. J. ROYDANT & CO., 75 Acre Lane, Brixton, S.W.

SOLIDIFIED SULPHURIC ACID.

A Chemical Compound, containing 72-75 per cent. available concentrated Acid.

Also Hyposulphite of Soda, pure white Sulphate of Alumina, Hydrate and Anhydrous Alumina, Blanc Fixe, Chloride, Nitrate, Sulphide, and Hydrate of Barium.

SOLE AGENTS:—JULIUS HULSEN & CO., NEWCASTLE-ON-TYNE.

HIGHEST AWARD AT THE INTERNATIONAL EXHIBITION, LONDON, 1885.
TRADE MARK Registered May 31st, 1887.

THE PIONEER TEMPERANCE BEVERAGES—Ch. Eng. Temp. Chron.



BECKETT'S

FRUIT SYRUPS & CORDIALS



"First-class beverages."—*The Grocer*.
"Have an established reputation."—*Noncon-*

"Delicious beverages."—*Scottish Good Templar*.
"Beckett's Fruit Syrups are not to be excelled."
—*Anti-Adulteration Review*.

"Exceedingly pleasant."—*The Rock*.
"Invigorating and refreshing."—*Manchester Courier*.

Price Lists, Testimonials, and other information sent post free on application to the Manufacturer—W. BECKETT, Heywood, Manchester
Wholesale and Export Agents—Barclay & Sons (Lim.), 95 Farringdon Street, E.C.; W. Edwards & Son, 157 Queen Victoria Street, E.C.;
J. Sanger & Sons, 489 Oxford Street; J. Woolley, Sons & Co., Manchester; Goodall, Backhouse & Co., Leeds.

MILD DRINKS.

Cherry, Raspberry,
Strawberry, Lime Fruit,
Black Currant, Lemon,
Orange, Jargonelle Pear,
Pineapple,
Raspberry Vinsgar,
Orange and Quinine.

HOT DRINKS.

Winterine, Honey Liqueur,
Aromatic Black Currant,
Gingerette, Ginger, Lemon,
Peppermint, Clove,
Elderberry, Syrup of Hops,
Lime Fruit Cordial,
Raspberry Cordial.

WYETH'S BEEF JUICE.

A liquid preparation of the Choicest Beef, containing the Nutritious Albuminous principles in an unaltered and soluble form.

Because WYETH'S BEEF JUICE is Pleasant and Agreeable to the taste.

Possesses five times more nourishing properties than other similar preparations.

Nutrient and stimulant properties so proportioned that it can be retained by the stomach in extreme cases of debility.

Two-ounce bottle contains all the Nutritious Albuminous principles of three pounds of clear lean meat.

Because these and many other points of superiority have been brought to the attention of Medical Men, Nurses, and Hospitals.

Because they have proven the claims *TRUE*, the demand for WYETH'S BEEF JUICE has become constant, and constantly increasing throughout Great Britain.

For the information of the

RETAIL CHEMIST

who has not already stocked WYETH'S BEEF JUICE we make this announcement.

GENERAL AGENTS FOR GREAT BRITAIN AND FRANCE—

LONDON. | **ROBERTS & CO.** | PARIS.

DISTRIBUTING AGENTS FOR

LANCASHIRE—JAS. WOOLLEY, SONS & CO., Manchester.

YORKSHIRE—GOODALL, BACKHOUSE & CO., Leeds.

SCOTLAND—RAIMES, CLARK & CO., Edinburgh.

And all Wholesale Druggists and Chemists.

PREPARED BY

JOHN WYETH & BROTHER,

Manufacturing Pharmaceutical Chemists,

PHILADELPHIA, PA., U.S.A.

LONDON, 30 SNOW HILL, E.C.

The Chemist and Druggist

SUPPLEMENT

A Copy of this Supplement is inserted in every number issued of "The Chemist & Druggist."

Businesses Wanted.
Businesses for Disposal.
Premises to Let.
Auction Sales.

SATURDAY, OCT. 15, 1892.

Partnerships.
Situations Vacant.
Situations Wanted.
Miscellaneous.

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1846, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—£670.—LONDON, W.—First-class Dispensing Business, situate near Victoria Station; good opportunity for a Branch from a good house; good position; present returns about £600 yearly; terms valuation only.

2.—£550.—LONDON, S.W.—Good business locality; Retail and Family Prescribing Business of good class; returns about £550 yearly, with profits above the average; well-fitted shop and good stock; offer wanted.

3.—£710.—LONDON, W.—Good-class Light Retail and Dispensing Business; returns last year £710; profits above the average; well-fitted shop and good stock; large house, on lease; about £550 required.

4.—£1,100.—LONDON, S.W.—Thickly-populated locality; good ready-money Retail and Dispensing Business; returns £1,100 yearly, with good profits; shop well-fitted and good stock; about £950 required.

5.—£400.—LONDON.—Good-class Retail and Dispensing Business; returns about £400 yearly, with good profits; well-fitted shop and large stock; about £300 required.

6.—£700.—BIRMINGHAM.—Retail and Dispensing Business; very good profitable concern; returns £700 yearly, with good Proprietaries attached; good house, with private entrance; price £480.

7.—£600.—SOMERSET.—Dispensing and Retail Business; returns at the rate of £600 yearly; handsome double-fronted shop, well stocked; good-sized house, on long lease; price £535.

8.—£2,000.—LARGE AGRICULTURAL CENTRE.—Partnership. A vacancy offers in a good Proprietary Business, Wholesale and Retail; about £2,000 required; particulars at private interview; banker's reference required.

9.—£100.—UNOPPOSED (neglected).—Devon Business for disposal; about £100 required; worth attention.

10.—£150.—UNOPPOSED.—Somerset Business; about £150 only required; about half value of stock and fixtures will be accepted from an immediate purchaser.

11.—£1130.—HOME COUNTY.—Good business town; old-established Family Business; returns about £1,130 yearly; profits £450 net; well-fitted shop and good stock; about £950 required.

12.—£800.—HOME COUNTY.—Dispensing and Retail Business well situated; returns £800 yearly, all good business; well-fitted shop and good working stock; comfortable 9-roomed house; garden and conservatory; about £500 required.

13.—£800.—LEICESTERSHIRE.—Retail and Dispensing Business; returns nearly £800 yearly; profits above the average; comfortable house, low rental, held on lease; very good warehouse and nice-sized garden; price £800.

14.—£550.—YORKS.—Light Retail and Dispensing Business; held by vendor many years; returns about £550 yearly; net profits nearly £200; handsomely-fitted shop; valuation only required; worth attention.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country. Particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION. Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the especial attention of a London Agent.

NOTICE.—Messrs. ORRIDGE & CO. have a large number of Businesses for Sale, suitable for Gentlemen with Small Capital. Full particulars on application.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

FOR SALE.

TO be Sold, the Fittings, with Bottles and Jars, complete (stock if required), of a small Chemist's Business, within 12 miles of Liverpool; valuation only required. Address, "Chemist," John Thompson (Limited), 58 Hanover Street, Liverpool.

TO Chemists and Druggists.—For sale, 4 elegant Dispensing Caskets: 20 Nests of Druggists' Drawers with glass labels, crystal knobs; splendid Wall Case in Mahogany; 4 magnificent Druggists' Bent Counter Show Cases; Window Enclosures; a number of Carboys; only suitable for a first-class shop; to be sacrificed; also the entire Fittings of a first-class Chemist's Shop to be sold in one lot. Edwards & Fothergill, Old Haymarket, Liverpool.

HANDSOME Specie Jar, 27 in., Royal arms (Maw's), ebonised mahogany stand, total height 40 in., cost £6 6s., good as new, £4; Swan-neck Carboys, one 8 gal., two 6 gal., worth £16, for £8, including stands; marble Mortar, 18 in., with Pestle, worth £2 25s.; iron Mortar and Pestle, and 3 compo ditto, 12s.; Drum Sieve, 60-hole, 6s.; about 20 Pink Pots, dome tops, 8 oz., at 1s.; large Globe Lamp, with 2 ruby lenses (1 chipped), enamelled-iron reflector, &c., and bracket, 45s.; Root-outer, wrought iron, 12s. 6d.; Fletcher's Triple Conc. Burner, 15s.; Symon's patent Till, with 4 compartments, 42s.; double Mahogany, Steps, 10s.; besides a few other cheap lots. Carriage and packing not included. All in 1 lot for £20. To be seen at 160 Falcon Road, Clapham Junction.

APPRENTICESHIPS.

APPRENTICE.—In first-class business in Tunbridge Wells; must have passed Preliminary or equivalent; premium required. Apply, "Major," 6 Park Road, Tunbridge Wells.

A VACANCY occurs in an old-established, Retail, Dispensing Chemist's Business, in the Crystal Palace district, for a well-educated youth as indoor apprentice; premium moderate. "Alpha," c/o Edwards & Son, 157 Queen Victoria Street, E.C.

TO Parents and Guardians.—Wanted by Chemist, a well-educated youth as an outdoor Apprentice, to replace one who, having qualified, is leaving; exceptional opportunity for gaining both Hospital and Retail experience; N. London. Address, D., 19 Tytberton Road, Holloway, N.

A WELL-EDUCATED Youth (17), who has passed the College of Preceptors' Examination, wishes to be apprenticed to a qualified Chemist and Druggist for 3 years; is willing to pay a premium. For particulars apply to Frank Kirk, 46 Khedive Road, Upton Lane, Forest Gate, London, E.C.

APPRENTICE.—John J. Shawyer, Chemist, has a vacancy for a well-educated youth as an Apprentice; every opportunity given for thoroughly learning the business; (Christian home, Baptist); full particulars. John J. Shawyer, Chemist to H.R.H. the Prince of Wales, 12 Wood Street, Swindon, Wilts.

F. J. BRETT,

VALUER, LEICESTER,

60 St. Stephen's Road.

References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS, 20 YEARS' EXPERIENCE.

NO CHARGE TO BUYERS.

STOCKTAKING UNNECESSARY.—Stocktaking is always dreaded by Chemists, and with a competent Valuer is not necessary.

F. J. BRETT is prepared to estimate or to value entire stocks as they stand with little or no inconvenience to ordinary business, and has repeatedly done so with entire satisfaction to those adopting this mode.

STOCKS AND FIXTURES BOUGHT FOR CASH.

YORKS.—Good-class concern; returns £700; price about £600 or valuation of stock and fixtures; part purchase-money can remain; plenty scope for increase. **STAFFS**.—Returns £500; price £300. **LONDON, W.**.—Nearly all Dispensing; returns £500; net profit £200; price £320. **LONDON** (Half-hour of).—Light Retail; returns £600; good house, garden, &c.; price £450 or valuation. **YORKS**.—Returns £1,000; General Retail; manufacturing district; rent nearly covered; valuation about £500. **WALES**.—Unopposed Retail; returns about £650; net profit over £250; rent £23; lease; at valuation of stock and fixtures about £400.

MESSRS. BERDOE & CO.

CHEMISTS' TRANSFER AGENTS & VALUERS,

30 JEWRY STREET, ALDGATE, E.C.

Established 1870.

VALUATIONS and TRANSFERS conducted in any part of the United Kingdom. Over 20 years' practical experience.

NO CHARGE TO PURCHASERS.

1.—**CATHEDRAL CITY**.—Old-established Retail, Dispensing and Prescribing Business; returns about £2,000, increasing yearly; net profit £600; good house, large garden; price £1,650 or offer.

2.—**SOUTH COAST**.—High-class Dispensing Business; held by vendor many years, and left now entirely to assistants; price about £2,000; valuation terms can be arranged.

3.—**HOME COUNTY**.—Small market town; death vacancy; Retail and Prescribing Business; returns £600, under management; capable of doing £1,000; good house, large garden; price £300.

4.—**YORKSHIRE**.—Inland health-resort; Retail and Dispensing Business; returns £1,000; net profit £300; 7,000 prescriptions yearly; low rent; excellent position; price £800; illness cause of sale.

5.—**LINCOLNSHIRE**.—Good market town; Retail, Dispensing and Prescribing Business; returns £1,100; good house; capital position in main street; price for goodwill £50, and valuation.

6.—**DERBY**.—Branch Retail and Prescribing Business; returns £500, principal would greatly increase; rent £30; good house; price £1,000; shop is well fitted and stocked.

7.—**SURREY**.—A thoroughly reliable good-class Light Retail, Dispensing, and Prescribing Business; returns £733; net profit £315; rent £40; long lease, good house; price £550.

8.—**LONDON, S.W.**.—Very old-established Family Retail and Dispensing Business, which has been under management the past 20 years; owner retiring; good house, long garden; price £800.

9.—**LONDON, W.**.—Retail and Dispensing Business; returns £750; well situated in main thoroughfare; good house, handsomely fitted and well stocked; price £550; every investigation allowed.

10.—**LONDON, N.**.—Death vacancy; Retail, Dispensing, and Prescribing Business; returns £637; net profit £230; corner shop, well fitted and stocked; good house; price £450, or offer.

Having a large number of Businesses on our Register it is impossible to advertise all. Purchasers may obtain information regarding others, either by personal application or by letter, stating requirements.

Messrs. Berdoe & Co., 30 Jewry Street, Aldgate, E.C.

BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

TO CHEMISTS.—Several Small Businesses for sale, from £250 to £600. Particulars to be had on application to "Alpha," c/o Evans, Sons & Co., 56 Hanover Street, Liverpool.

TO ASSISTANTS in want of a Business.—A great bargain; seaside; owner retiring; every investigation courted and desired; no fair offer declined. M. P. S., c/o Mr. Squire, Chemist, Notting Hill, London.

IMMEDIATE Disposal, through advertiser taking a larger business, an old Prescribing and General Retail; established many years; full prices. Full particulars, J. Waters, Post Office, Tunstall, Stoke-on-Trent.

£250.—Old-established Business for sale; suit beginner with small capital; Prescribing and General Retail; Photographic connection. Apply to J. W.E., 2 Frances Street, Woolwich, Kent.

70

Messrs. CROCKER & CO.

Trade Valuers, Transfer Agents, and Accountants,

15 WALBROOK, E.C.,

Have at the present time a large number of inquiries for good-class Country Businesses, and they invite communications from intending vendors. **NO CHARGE IS MADE UNLESS A SALE IS EFFECTED**, and particulars of businesses are given to those only having the required amount of capital to invest, thus guaranteeing only *bona-fide* inquiries and obviating publicity. **VALUATIONS MADE FOR PROBATE OR TRANSFER, BOOKS AUDITED AND BALANCE-SHEETS PREPARED IN ANY PART OF THE UNITED KINGDOM.** Having had many years' practical experience in the Wholesale and Retail Drug Trade, C. & Co. can offer valuable assistance and advice in the conduct of such matters. References permitted to past and present Clients, also to the Leading Wholesale Houses in the Trade.

LONDON, W..—Old-established business; well-fitted pharmacy and good stock; returns under a manager £400; price £350 or valuation. **ISLE O' MAN**.—Good-class Retail and Dispensing trade; returns £500; price £400; rent £36; handsome pharmacy, and good house.

SURREY.—Unopposed Retail and Dispensing trade; much neglected; returns £450; price £400; good opportunity for a pushing man.

LONDON, W..—Family and Dispensing trade; returns £1,075; price £1,000; an exceptionally good investment, and worth attention.

LONDON, N..—Good Retail and Dispensing, with several established proprietaries; returns £1,000; price £900.

MIDLANDS.—Light Retail, Prescribing, and Dispensing at fair prices; returns £550; price £450.

YORKSHIRE.—Old-established Dispensing and Agricultural Business, with good house attached; returns £700; price, valuation.

LONDON, N..—Old-established Dispensing, capable of great increase; handsome pharmacy; returns £520; price £450.

CITY.—Old-established Dispensing in main thoroughfare, having a first-class connection; cause of sale ill-health; price £300; open to offer.

SURREY.—Unopposed good-class Retail and Dispensing, with good stock; returns over £700; price £550.

LONDON, S.E. (main road, exceptionally good investment).—Ready-money Retail and Prescribing; returns £600; price £250.

NO CHARGE TO PURCHASERS.

VALUATIONS A SPECIALITY TERMS ON APPLICATION.

BUSINESSES FOR DISPOSAL—Continued

A SMALL, Genuine Chemist's Business for sale—a bargain; must be sold, through illness; suitable for an energetic Chemist capable of Prescribing; good 10-roomed house, low rent. Apply, S. L. 8, Forwood Terrace, Torquay.

FOR immediate Disposal, the unopposed and old-established Business of Mr. Bridger, Hatherleigh, North Devon. Apply, Orridge & Co., Ludgate Hill, London; Evans, Gadd & Co., Exeter; or Mr. Horn, Auctioneer, Hatherleigh.

FOR Disposal, General Drug Business, in mining village in South Yorkshire; population 3,000; returns, under management, £9 per week; price about £150 for everything. "Csmphor," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

CHEMIST'S Business in N.W. District, averaging for 10 years over £900; price £650, cash down, no credit; in same hands many years, and at full prices; a long introduction will be given; rent low; comfortable house. "Cambridge," 40 Aldersgate Street.

THE Business of a leading London Wholesale Druggists' Sundriesman and Surgical, &c., Maker for Sale; ill-health only reason; price, including stock, about £7,000; principals only. Leggett, Robinson & Co., Solicitors, 5 Raymond Buildings, Gray's Inn, London, W.C.

TO Chemists and Druggists.—To be disposed of, Business in best situation in Wolverhampton; has not changed hands for 32 years; rent £80; Fixtures and Stock under £250; splendid opportunity for a business man. Apply, Skidmore & Son, Valuers, Wolverhampton.

MID-WALES.—For disposal in a good market town, an old-established Agricultural Business; good shop; warehouses, and roomy dwelling-house; rent £31; for special reasons will be sold at a valuation of stock and fixtures. For further particulars apply, Southall, Bros. & Barclay, Birmingham.

A GOOD Retail, Prescribing, and Agricultural Business; market town in Lincolnshire; all newly fitted; well stocked; satisfactory reasons for disposal; next door to Post-office, opposite Corn Exchange. Particulars of A. C. Farmer, Chemist, Spilsby. A week's trial allowed to a genuine purchaser.

LIGHT Retail, Dispensing, and Prescribing Business, in manufacturing town in Lancashire, for immediate sale; a bargain; net profits, £225; low expenses; double-fronted shop, good house; only parties who mean business reply. S. B., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BUSINESSES FOR DISPOSAL—Continued.

E. STOW MORRIS. 117 Hesse Road, Hull, wishes to dispose of his Light Retail, Dispensing, and Prescribing Business, at once, having bought larger concern; fitted with mahogany and well stocked; good house; returns £6 weekly; price £150 to immediate purchaser; part could remain on easy terms.

NORTH MIDLANDS.—An old-established profitable Country Retail and Prescribing Business, well situated in thriving market town; returns £1,400; price £550; good house and garden, with stable, &c.; net profit £400 a year. Apply, "Chrome," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

DEATH VACANCY.—Very old-established Mixed Cash Retail; corner (4 streets) position; close to main thoroughfare; stock and fixtures (low) at valuation only; a capital opening for energetic young man (unmarried) with small sum at command. Further particulars from W. H. Goldsmith, 3 Grey Street, Hull.

HOME County.—Good-class Retail, Dispensing, and Prescribing Business; in present hands 22 years; capable of increase in the hands of an energetic man; returns £1,400; good house and premises; price £1,000. Further particulars on application, 44/76, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

£150.—LONDON (South); main road; great shopping centre; Branch Business, under management; returns £11 to £12 weekly; good house, side entrance; could let off half the rent; cause of sale going into the medical profession; less than valuation. 88/99, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

DEATH vacancy.—London suburb, N.—Genuine new Business, opened 6 months, returns in that time £160; attractive shop, good house, garden, private entrance; valuable lease, at low rent; in a rapidly increasing neighbourhood; worth attention; no real opposition; terms can be arranged. C. B., 15 Holland Grove, Brixton, S.W.

MIDLANDS.—Old-established good-class Retail, in pleasant market town; prices above the average; returns £800; house 9 rooms; good garden; the premises are held on 14 years' unexpired lease and at a low rent; there is an unusually large stock, which, with fixtures, would approach price asked, £800. F. J. Brett, Valuer, 60 St. Stephen's Road, Leicester.

LONDON, N.—Prescribing and Retail (middle-class), in thickly populated district and good thoroughfare; large house, side entrance; lease; low rent; well-fitted and good appearance; returns about £15 per week; very profitable, capable of great extension; price £210; part could remain; wholesale references given and required. Address, 186/11, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MONTGOMERYSHIRE.—To be disposed of, a Chemist's Business, with which is combined Grocery, Ironmongery, Stationery, and Gilbey's Agency; the present proprietor also holds the Post Office appointment, and has carried on the business for 30 years; well-fitted shop, warehouses, and small house; incoming by valuation. Apply, John E. Thistle, Auctioneer, Montgomery.

GENUINE Retail Drug Business for sale; established 20 years ago by present proprietor, who is retiring from retail; long lease, as lock-up shop, or with house; 10 minutes from London Bridge, Surrey side; thickly populated; very brisk ready-money drug trade, with two or three good proprietary lines. Address, "Practical Chemist," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

THOMAS TOMLINSON & SON, Chemists' Valuers, 9 New Cannon Street, Manchester, have Businesses for Disposal in Rochdale, about £100; Roebdale, about £800; Sheffield, about £450; Sheffield, about £170; Penrith, about £1,000; Southport, about £280; Oldham, about £350; Oldham, about £600; Bolton, about £350; Nottingham, about £400; Farsley, about £250; Owston Ferry, about £220; Bradford, about £650; Ripon, about £650; Warrington, about £250; Liverpool, about £200; Liverpool Broadgreen, about £200; Bradford, Manchester, about £110, and several others.

PARTNERSHIPS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

MIDLAND Counties.—Partnership.—A vacancy offers in a good General Business, with Branches; also a semi-wholesale trade; income must be prepared with at least £1,000; particulars at interview; banker's reference required. Apply, "Laboratory," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BUSINESSES WANTED.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED, a good-class Agricultural Business; must bear strictest investigation; terms cash; no agents need apply. Full particulars in strict confidence, to A. J., c/o Messrs. Meggesson & Son, Miles Lane, London, E.C.

WANTED, a good-class Retail, Prescribing, and Dispensing Business, within 50 miles of Manchester, returning about £1,000; cash ready. Address, "Rhei," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, genuine Dispensing Business with good-class Retail, in populous provincial town; returns about £800; or Partnership in larger concern not objected to. Particulars, in strict confidence, "Benzoin," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

IMMEDIATELY, a good-class Retail and Dispensing Business; must have a decent house, and show a net profit of not less than £250 a year; a fair price will be paid for a reliable business; Yorkshire or Lancashire preferred. L. K., c/o Messrs. Hearon, Squire & Francis, 38 Southwark Street, London.

WANTED, at once, a good-class Dispensing, Prescribing, and Light Retail Business, in the South or West of England; country or seaside; returns £800 to £1,200; advertiser is prepared with the necessary cash. Full particulars, in confidence, addressed to C. W., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, at once, a good Country Retail and Dispensing Business, returning about £1,000 a year; locality not so much an object as a reliable business with fair domestic accommodation; a Partnership in a larger concern would be entertained if with view to succession. "Minor," care of Mr. Ladbury, Nottingham Road, Melton Mowbray.

TO LET.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

TO Chemists.—Handsome Shop, in main road, Greenwich, to be let; newly built on site of very old-established business. Apply, Blake & Dannatt, Auctioneers, Nelson Street, Greenwich.

AN opportunity occurs of opening a business in rapidly-increasing working-class neighbourhood of country town in East Anglia, where a cash trade could be readily obtained; a registered Dentist or good Extractor would do well; good house and shop, at low rent. 182/13, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WORKSHOP, NOTTS.

TO CHEMICAL MANUFACTURERS AND OTHERS.—To be let, on Yearly Tenancy, or for a Term of Years, from Michaelmas, 1892, with or without option of purchase.

All those well-established and valuable MANUFACTURING PREMISES, including Engines, Boilers, Retorts, Condensers, Pumps, Tanks, and other Trade Fixtures, with Workshops, Offices, &c., which have been used for many years past for Manufacturing Wood Acid, its Compounds, and other Chemicals.

The raw materials required consist chiefly of wood refuse, and Workshop being the centre of an extensive timber-growing district, and of the timber-sawing and wood-turning industries, a great advantage is thus afforded.

The works are situated at Worksop, in close proximity to large collieries, and to the Chesterfield and Stockwith Canal, and are connected with the main line of the M. S. & L. Railway by means of a siding.

Also a capital modern-built RESIDENCE near to the Works, with Gardens, Stables, and other convenient out-offices thereto.

And also 13 a. 3 r. 7 p. of LAND, inclusive of the sites of the works and residence.

For particulars and leave to view, apply to

J. HASLAM, Esq.,
Newcastle Estate Office, Worksop.
Sept., 1892.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED, a Junior Assistant; abstainer preferred. J. Ingall, Ashford, Kent.

IMMEDIATELY, an Assistant, about 23, well up in dispensing. J. W. Taplin, 96 Craven Park Road, Harlesden, N.W.

IMMEDIATELY.—Junior Assistant, indoors; please give full particulars and reference in first letter. Richards, Chemist, Clifton.

CHEMIST: qualified. Apply, stating particulars and salary expected, to "North," c/o Wright, Layman & Umney, 48 & 50 Southwark Street, London, S.E.

SITUATIONS OPEN—Continued.

QUALIFIED Assistant; indoors; under 30; good references. Apply, with full particulars as to salary, when disengaged, &c., to Bunker, 135 Great Dover Street, S.E.

SMART, active Junior, for Counter; good appearance and address; state age, height, salary (outdoors), and enclose photo. Wand, Chemist, Haymarket, Leicester.

WANTED by Wholesale Druggist, London, an efficient Invoice Clerk. Apply by letter, addressed H., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, Assistant to manage Branch; qualified; aged about 25; hours moderate, with half-holiday weekly. Apply, "Loolah," c/o Evans, Sons & Co., Liverpool.

QUALIFIED Assistant; by November 5; indoors; permanent; and progressive salary to good man. Apply to A. C. Goodchild, 12 and 14 High Street, Harlesden, Willesden Junction.

WANTED, a competent Assistant, of good education and address, to represent a firm of London Wholesale Druggists. 185/17, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, for the Winter season, a young English Assistant Chemist, who can speak either French, German, or Italian. Please send photograph. Giuseppe Tassarotti, Bordighera, Italy.

WANTED, an Agent visiting London Shippers of London as well as Chemists and Druggists, for the sale of Seltzogenes of well-known firm. Apply to Leblanc, 71 Boulevard Strasbourg, Paris.

WANTED, a qualified Assistant capable of managing a good-class Drug and Grocery business; knowledge of Welsh necessary. Apply, with full particulars, E. Lloyd, Chemist, Colwyn Bay.

DISPENSER in good-class Family and Dispensing Business. Apply, stating age, height, salary, and enclose photo, to C. W. Turner, Proprietor of Anderson & Virgo's, The Foregate, Worcester.

IMMEDIATELY; an accurate Dispenser, of town experience, writing a good hand, about 5 ft. 10 in., and 25 years of age, for a permanency. Apply, 5 Bathurst Street, Sussex Square, Hyde Park.

WANTED, immediately, Invoice Clerk for Wholesale Drug and Patent Medicine trade. Apply, stating previous experience, references, and salary required, to Goodall, Backhouse & Co., Leeds.

AT ONCE.—Junior (about 20), in Light Country Retail and Prescribing business; time for study. State age, references, and usual particulars, to 183/9, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

JUNIOR wanted, at once, in Mixed Country business; facilities for study, and assistance to an industrious junior. Apply, by letter, giving all usual particulars, with photo, to H. Oliver, Chemist, West Malling, Kent.

AN Assistant, General Retail Business, about 20 miles from London; one other kept; good references indispensable. Apply, with full particulars, "Antipyrin," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

PARIS.—Mr. D. Clerfond, Pharmacist and English Chemist, 28 Place Vendôme, Paris, requires an English Assistant; an excellent opportunity for anyone desirous of improving his knowledge of the French tongue and French pharmacy.

WANTED, a qualified Junior Assistant, aged about 22, for good-class Retail business; hours 8 to 8, except Wednesday, closed 1 o'clock, and Saturday open till 11; no Sunday duty; outdoors. Apply, J. B. Emerson, 8 Church Street, West Hartlepool.

ASSISTANT; smart, businesslike man; must be well up in Dispensing; one just completed his full term of apprenticeship treated with liberal terms and comfortable berth; enclose carte (to be returned). Address, 1. W., 22 Craven Terrace, Lancaster Gate, W.

WANTED, a gentlemanly young man as Assistant; must have had experience in the Wholesale Surgical Instrument and Druggists' Sundries trade. Apply by letter, stating experience and salary required, to 137/38, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, immediately, qualified Assistant, aged about 24, capable of taking management; good-class Retail and Dispensing; must be a good counterman. Apply, stating age, height, salary required (indoors) with photo and references, to R. Stockdale, Waterloo, Liverpool.

IMMEDIATELY, a qualified Assistant accustomed to middle-class Retail and Dispensing; indoors; must be steady and obliging; a good Junior also required. State age, experience, reference, and salary required, enclose photo if convenient, J. Fawcett, Bebington, near Birkenhead.

ASSISTANT. accustomed to a Mixed business; must be duly qualified, well up in all branches of the trade, and able to take entire charge. Apply, with full particulars, stating age, height, salary required (indoors), and enclosing photo, to Arthur Carlton, Chemist and Druggist, Peterborough.

ASSISTANT; good Dispenser, and address, with knowledge of Heavy trade, and quick Counterman. Apply, Thomas Beech, Chemist, Klug's Beath, Birmingham.

JUNIOR (about 21), by 24th inst., for good-class Retail and Dispensing Cash business. State age, height, salary (outdoors), and give particulars of experience (enclosing photo), T. Buxton, Chemist, Clifton.

MANAGER, married, wanted immediately for country town, Midlands; state age, number of family, qualifications, salary required; abstainer, and capable dispenser preferred. permanent to suitable man. Address, "Antidony," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

EXPERIENCED Assistant (outdoors) wanted for brisk Retail, in poor locality; if with East-end experience preferred; must be a good Prescriber (and abstainer), with good references. Write only, giving full particulars, salary, &c., to "Delta," 26 Park Road, New Wandsworth, S.W.

COUNTER Assistants wanted for Dublin Branch; applicants must be of good address and sharp at their business. For interview in London, write, stating full details of experience, age, and salary (outdoors) required, to the Secretary, Junior Army and Navy Stores (Limited), York House, Regent Street, S.W.

WANTED immediately, two active, experienced Assistants (Minor qualification preferred) for pure Drug and Dispensing business; no heavy trade; abstainers preferred; short hours, no Sunday duty. Apply, stating age, salary required (outdoors), experience, and references, to F. Spite & Co. (Limited) 25 St. Enoch Square, Glasgow.

QUALIFIED Assistant; smart, businesslike man; one accustomed to laboratory work or making Tincture Infusions and most B.P. preparations; who also would be willing to take charge of shop when required. State salary required (outdoors), particulars of last two appointments to T. E. B., 31 Great James Street, Bloom-bury, W.C.

ACTIVE Assistant, qualified, and capable of holding manager's position, wanted for Midland town; permanency and good prospects to suitable man; brisk business on Store lines. Apply, stating full particulars of age, reference, experience, and salary required (outdoors), to "Midland," c/o Clarke, Son & Platt, 85 Gracechurch Street, E.C.

LABORATORY MANAGER.—Hicks & Co., Ltd., Cardiff, require the services of a gentleman experienced in the manufacture of Pharmaceutical preparations and Confectionery Essences; an Assistant accustomed to putting up Surgeons' orders, &c., also required. State age, experience, salary required, and enclose photo, with references.

WANTED, a Manager for an important branch of a first-class Drug Stores; none but qualified men need apply, and on y who have a thorough knowledge of this class of business; perseverance, originality and intelligence most essential, and qualified to manage a staff of men. Apply, by letter, 185/13, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

QUALIFIED Assistants wanted (outdoors), for high-class Cash Business on South Coast; must be a good Dispenser. Also for brisk Cash Business in S.E. district of London; moderate hours in both cases. Apply, stating last three engagements, salary required, age, height, references, and all other particulars, with photo to B. M., c/o Messrs. Wrigley, Layman & Umney, 50 Southwark Street, S.E.

ADVERTISER. about to open Branch in good, healthy country town, wishes to meet with a competent Manager who desires to gradually acquire the business; willing to accept Partner from the start; must be a competent Extractor or registered Dentist. rapidly increasing working-class neighbourhood; good house, low rent. 182/12, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WAREHOUSEMAN.—Wanted an experienced Warehouseman who thoroughly knows the duties and management of Wholesale House doing a large trade with Chemists and Surgeons; one who has had good experience, and is capable of superintending a considerable amount of detail. Apply, stating age, salary required, and full particulars, to "Wholesale," 41 Coleridge Row, Islington.

IMMEDIATELY; for select Pharmacy in fashionable suburb, where one is kept, a thoroughly reliable Assistant, with first-class references; must be a quick, accurate Dispenser, with gentlemanly bearing, pleasing address, and good tact for Retail; one seeking a permanency preferred. Apply, by letter, stating age, qualifications, experience, and of pleasing address. Apply to L. B. C., c/o Crossley, Moir & Co., Advertising Agents, 57A Coleman Street, E.C.

WANTED, as Travelling Representative in the provinces, to sell on Doctors and Chemists, introducing new chemical and Pharmaceutical products, a young man well qualified in therapeutics and practical chemistry and pharmacy, possessing energy, tact, good business abilities, and of pleasing address. Apply by letter, stating age, qualifications, experience, and salary expected, to L. B. C., c/o Crossley, Moir & Co., Advertising Agents, 57A Coleman Street, E.C.

IMMEDIATELY.—Qualified outdoor Assistant (under 32), seeking permanency, to manage Retail branch, and occasionally assist at main establishment (Family and Pharmaceutical requisites); must be well recommended as steady, industrious, obliging, and trustworthy; Teeth-extractor, Prescriber, and pushing salesman required. State age, height, experience, salary, &c. (enclosing photo and references), to J. Whitton, Red Cross Pharmacies, Freeman Street (and Oxford Street), Grimsby.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

- AS** Assistant; outdoors; experienced; aged 25. W., 17 Ramsden Terrace, Leeds.
- JUNIOR** (21); 8 years' experience; abstainer. S. Williams, 53 Narrow Street, Peterborough.
- DISPENSER** to Surgeon or Hospital; qualified; outdoors. Carden, 122 Felix Road, Ealing.
- AS** Manager; aged 31; first-class experience and references. "Qualified," Probus, Cornwall.
- JUNIOR**; disengaged; East Anglia preferred. W. L. French, 58 North Hill, Colchester.
- ASSISTANT** (22); height 6 ft.; 7½ years' experience. Priestly, c/o Hardman, Chemist, Leeds.
- LOCUM** or permanency; experienced; aged 37; good Dispenser. M., 13 Clouston Street, S.W.
- TEMPORARY** Manager or Senior; qualified. Particulars of "Locum," Trinity Square, Llandudno.
- AS** Manager or Traveller; 20 years' first-class London experience. M., 217 Milkwood Road, S.E.
- PART-TIME** (22); London; 6 years' experience. Barnes, Mr. Partlo, North Town, Maidenhead.
- AS** Manager; view to purchase; disengaged. "Nux," Sunny Bank, Lettbridge Road, Southport.
- MANAGER**; qualified; good references; disengaged. "Chemist," 18 Madoc Street, Llandudno.
- EVENING** Dispensing or Retail; aged 25; experienced. H., 46 High Street, Notting Hill Gate, W.
- DISPENSING** by Lady; thorough training; Dispensary experience. N., 26 Vassall Road, Brixton.
- JUNIOR** in good-class business; abstainer; 19; disengaged; good references. Wilman, Lincoln.
- ASSISTANT**; well up in first-class Dispensing and Retail, Prescribing, Extracting. W., 135 Oxbridge Road, W.
- TEMPORARY** or Part-time; London or suburbs. Trammer, c/o Ixton, Chemist, Teddington.
- PART-TIME** (29); disengaged after 6 P.M. "Radix," 22 Palace Street, Buckingham Gate, W.
- ASSISTANT** (24); tall; qualified; London and outdoors preferred. Evans, Bank House, Llandysil.
- PART-TIME**.—Wanted, occasional evening work; qualified. "Chemist," 29 Shirlock Road, N.W.
- LOCUM-TENENS**; registered; London preferred. H. Poole, 6 Castlewood Road, Stamford Hill, N.
- DISPENSER** (25); qualified; abstainer; outdoors; stores. "Minor," 35 Trowbridge Road, Bradford, Wilts.
- TOWN** Traveller; good connection. "Ebor," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.
- ASSISTANT**; Minor; 6½ years' experience; outdoors preferred. Elphinstone, 75 Alderney Street, S.W.
- AS** Manager; aged 45; good references. Address, "Alpha," 2 A. H. Croft Road, Grove Road, Bow, London.
- LOCUM-TENENS** or Permanency; disengaged; aged 26. "Extractor," 2 Horton Street, Levisham, S.E.
- LOCUM**; disengaged October 25th. F. H. Sykes, c/o W. W. Johnson, Coemi t. Llandrindod Wells, Radnorshire.
- DISENGAGED** (24); tall; 9½ years' experience; good references. "Exalgine," 21 Cavendish Place, Carlisle.
- PART-TIME**, to attend evening lectures at Wills; aged 23. "Statim," 40 Hampstead Road, Dorking.
- MANAGER** or Dispenser; qualified; long experience. "Chemist," 93 Marlborough Road, Grandpont, Oxford.
- MINOR** Student requires evening engagement; experienced. "Minor," 62 Trinity Square, Borough, S.E.

TEMPORARY Assistant, or Manager; qualified; North preferred. "Chemist," 48 Richmond Street, Ayrington.

JUNIOR; 20; 4½ years in good business. "Specs," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

JUNIOR; 5 years' experience; London preferred. State hours and full particulars to J. E. Owen, Post Office, Willesden.

WHOLESALE; Wet or Dry; experienced; good references. "Chemists," 37 Downshire Hill, Hampstead.

PART or Whole Time; aged 25; good Dispenser; London preferred. "Chloralamid," 11 Omega Place, St. John's Wood.

BRANCH Manager, or Manager with view to purchase; 26; experienced; outdoors. A., 19 Nottingham Road, Mansfield.

AS voluntary Assistant in good Chemistry; Diploma Chemist from Brussels; 10 weeks in London. 43 Lynton Road, S.E.

AS Manager; aged 34; Prescriber and Extractor; disengaged. "Alpha," Banbury Villa, Putney Bridge Road, Putney.

SITUATION as Porter, or any capacity; knowledge of Dispensing; good references; aged 26. A. R., 94 High Street, Dover.

CHEMIST; registered; middle-aged; Dispenser to Surgeon, Accoucher, &c. Address, W., 254 Commercial Road, E.

AT once; as Assistant; aged 35; unqualified; indoors; permanency preferred; good reference; single. Lumbus, Aston, Nantwich.

MANAGEMENT; immediately; 30; qualified; good Dispenser, experience and address. "Chemist," 19 Claremont Terrace, York.

BRANCH or outdoors; Extractor and Prescriber; terms low; country preferred; 34 years. "Fides," 112 High Street, Fulham.

DISPENSER to Surgeon or Hospital; unqualified; outdoors; 20 years' experience; first references. Wood, 22 Elaine Grove, N.W.

AS Locum or Manager, by the day, week, or month; disengaged; qualified; reference. B. C., 56 Adolphus Street, Deptford, London.

AS Junior (20); 5 ft. 10 in.; 3½ years' good experience; Leeds or Bradford district preferred. F. A. C., 11 Chandos Street, Keigley.

TRAVELLER for Drug or Sundry House, or both; 10 years' Retail experience; aged 25. "Veritas," 80 May Villas, East Hill, Dartford.

JUNIOR in good-class business; 20½; 4½ years' experience; London preferred; disengaged. W., 19 Lassington Road, Hampstead, N.W.

SITUATION wanted; aged 21; thoroughly conversant with Patents, Sundries, &c.; London preferred. C. W., 106 Loughborough Road, S.W.

MANAGER or Assistant; aged 26; Major qualification; good experience; references. "Chemist," 9 Commercial Place, Aberdeen.

ENERGETIC Branch Manager; experienced; business tact and push; single (36); unqualified. "Abstainer," 37 Market Place, Devizes.

ASSISTANT in good-class business; qualified; aged 25; medium height; good references. J., 14 Newstead Road, Smithdown Road, Liverpool.

IMPROVER or Junior; 2½ years' experience; aged 21; height 5 ft. 10 in.; or situation in Wholesale. Norton, 4 Trafalgar Road, Brompton, S.W.

ASSISTANT (27); good experience and reference; in or near Manchester preferred; disengaged. "Myrrh," c/o Evans, Chemist, Middleton, Lancs.

DISENGAGED October 25; engagement solicited by Junior; accustomed to store trade; London preferred. Goode, 72 Sandgate Road, Folkestone.

MANAGER; married; qualified; 14 years' experience town and country; Extractor. 178/7, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MANAGER; qualified; married; aged 32; experienced Dispenser, Prescriber, Extractor; excellent references; disengaged. B. B., 15 College Street, Park, Salisbury.

PART-TIME, as Dispenser to Doctor or Assistant to Chemist. C. H. G., 15 St. Dunat's Road, S.E. Neighbourhood of address preferred; 7 years' experience.

DENTAL Mechanic; aged 36; married; wages 35s. to £2; 5 years with last employer. Address, "Dental," Victoria Villa, Windmill Road, New Brompton, Kent.

SITUATIONS WANTED—Continued.

LOCUM (35); abstainer; qualified; disengaged. "Minor," 8 Castle Street East, W.

PART-TIME; outdoors; disengaged after 3 P.M.; Major. "Eetas," 6 Calabria Road, Highbury.

SUCCESSION.—Manager, easy terms, succession in a small business. E., 195 Tufnell Park Road, N.

ENGAGEMENT until 5 or 6; experienced; qualified; outdoors. "Chemist," 96 Tunis Road, W.

AS Dispenser to Surgeon or Chemist, or Part-time; experienced. W. H., 51 High Street, Soudown, I.W.

WANTED, part or whole time situation in London, at once; good references. "Quinine," 173 Marylebone Road, London.

AS Manager (Working), Pharmaceutical Laboratory; 6 years last situation, 4 previous. O. B., 65 Downham Road, Southgate Road, N.

JUNIOR; aged 23; London, in Dispensing Business; time for study preferred; Eastbourne experience. H., 83 Roadswell Road, Limehouse.

MANAGER or otherwise; outdoors; married, good business man; first-class City experience. "Mercator," c/o Pinsbury Park Avenue, N.

ASSISTANT; good experience (London); time for study; in London or suburbs; aged 22; height 5 ft. 10 in. Hodge, 12 Melbourne Road, Leicester.

AS Manager; 11 years last situation; disengaged; small capital; working Partner if desired. 185/33, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BRANCH Manager in country; qualified; good experience and references; in or outdoors. 176/34, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ASSISTANT; aged 27; 10 years' experience town and country; height 5 ft. 9 in.; disengaged; the North preferred. R. T. D., 9 Montaucho Terrace, Barland Castle.

ASSISTANT; experienced; in Mixed Country Business; Prescriber; single; disengaged; good references. "Beta," Mr. E. W. A. Sayer, High Street, Watton S.O., Norfolk.

MANAGERIAL or Locum-Tenens work; large experience; thorough Dispenser; used to brisk trade; qualified. Address, "Chemists," 59 Flaxman Road, S.E.

BRANCH Manager or Assistant; permanency; aged 28; married; 12 years' varied experience; Extractor; excellent references. "Manager," 32 Powis Street, Woolwich.

CHEMIST, qualified, desires situation as Dispenser or Doctor's unqualified Assistant; capital Prescriber. 181/11, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SUNDRIES.—Engagement wanted in warehouse, any capacity, or to make and put-up Proprietary or Toilet requisites; experience; good references. Edwards, 11 Powell Street, E.C.

AS Assistant, in good-class Country business; short hours; aged 28; unqualified; Dispensing, Prescribing, and Agricultural experience; Churchman. "Alpha," 61 Talbot Road, Blackpool.

MINOR (23); requires permanent situation in a first-class business in City or suburbs; good Dispenser; offers not answered in two days declined. R. F., 11 Daeres Road, Forest Hill.

LOCUM-TENENS; Temporary or otherwise; qualified; experienced; steady and reliable; highest references; terms moderate; disengaged. "Extractor," 23 Florence Road, London, S.E.

TRAVELLER; 12 years' Wholesale and Retail experience combined with Travelling; good Salesman; moderate terms. "Varie," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MEDICAL Student, reading for Final, would be glad to assist in Dispensing, &c.; evenings and other spare time. "Medicus," 182/27, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

AS Junior; Dispensing and Retail; 4 years' experience, 3½ Irish; aged 22; height 5 ft. 8 in.; capital references and testimonials. Apply, "Ferrum," c/o Mr. Hill, Chemist, Winchcomb Street, Cheltenham.

BRANCH Manager; married; qualified (examination); most varied experience; sober, industrious; exceptional references; successful Prescriber, now disengaged. "Bryoula," 8 Exbury Road, Oxford Bridge, London.

MANAGER or outdoor Assistant; qualified; married, no family; aged 46; height 5 ft. 9 in.; good references; can Diagnose, Prescribe, and Extract Teeth; disengaged Oct. 17, 1892. Address, "Alpha," 35 Porchester Road, Bayswater, London.

AS Traveller (West of England preferred), by Chemist, aged 30 who is well known to Medical Men and Chemists in Bristol and neighbourhood. Apply, 188/6, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

CLERK.—Wanted by advertiser, engagement as above; good experience of Druggists' Sundries and Patent Medicine, also slight knowledge of Drugs; good reference. Address, "Sundries," 261 Cornwall Road, North Kensington, W.

AS Manager, or Senior (outdoor branch), or otherwise; aged 28; married; unqualified; good Dispenser, Prescriber, and Extractor; thorough knowledge of Photography; 2 years with present employer. Address, C. T., 31 High Street, Winchester, Hants.

WHOLESALE.—Advertiser, aged 26, has had three years' experience in large provincial Wholesale house, last half in laboratory, and desires similar engagement in first-class house. Thomas, 8 Harborne Road, Birmingham.

MANAGER, Senior, or Locum (30); temporary, four to six months; outdoors; qualified (in view of purchase would be entertained); Midlands preferred. Address, "Chemist," c/o Clewlow, 40 Hertford Road, Sparkbrook, Birmingham.

ASSISTANT; Retail or Wholesale; 6 years' London Retail experience; unqualified; good knowledge Veterinary Medicines; tall; aged 21½; disengaged. "Oascara," c/o Barrett, Stationers, 8 Duke Street Mansions, Grosvenor Square, London.

TRAVELLER (West of England, Wales, Midlands, or North); Drugs, Sundries, Specialities, Perfumes, or Soaps; large experience; commission and expenses. Address, "Taraxacum," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

LOCUM-TENENS desires a comfortable permanency as Branch Manager or Senior in first-class business; no Stores; over 20 years' town and country experience; single; aged 38; Minor qualification; good Prescriber. "Beta," Arddleen, Oswestry.

MISCELLANEOUS.

PHARMACEUTICAL SOCIETY OF IRELAND.—Professor Tichborne, LL.D., will deliver a Lecture on the 1st of November, 1892, at 8 o'clock P.M., in the Examination Hall of the Society, 67 Great Mount Street. Subject: "Carbolic Acid." This meeting is free to all members of the Pharmaceutical Society, Associate Druggists, and their Assistants.

A NEW and valuable Dentrifice to be disposed of, for cash or for a royalty; a fortune if worked with energy and enterprise. For full particulars apply, by letter, A. G. R., c/o Weightman, 11 Idol Lane, London, E.C.

DENTISTRY.—Mechanical Dentistry. — All kinds executed with promptitude and despatch; repairs same day; moderate charges; price list free. Wheeler & Co., Manufacturing Dentists, 20 Comp'ou Street, Brunswick Square, W.O.

PRELIMINARY AND MINOR.

STUDENTS! Write to-day for a "Guide to Examination," gratis and post free, giving the best advice how to prepare. Knotty Points in Latin Grammar, 1s. 6d.; Caesar Simplified, 1s.; Metric System Simplified, 1s.; How to Write an Essay, 3d.; Equations Simplified, 1s.; Student's Herbarium, 100 specimens, 7s. 6d., post free. Mr. J. Tully (Hills Prize-man), Chemist, Hastings.

THE BOTANICAL STUDENT'S SET OF MICROSCOPIC SLIDES. Illustrating the structure of Stems, Roots, Leaves, the cellular arrangement of Exogenous, Endogenous, and Aerenchymatous Plants, Nuclei of Cells, structure of Petals, Anthers, Pollen Grains and Ovary, Stomata, Cystoliths, Raphides, Annular Rings, Spiral, Pitted, Scleriform, and Laticiferous Vessels. This set of slides is highly recommended by Arthur C. Cole, Esq., F.R.M.S. (author of "Studies in Microscopical Science"). Price complete, in elegant folding case, 12/-. Post Free from Edwin Terry, F.R.M.S., 41 Nightingale Lane, Balham, S.W.

LONDON AND LANCASHIRE FIRE INSURANCE COMPANY.

Head Offices { 45 DALE STREET, LIVERPOOL.
74 KING WILLIAM STREET, LONDON.
West-end Branch: 26 PALL MALL, S.W.

Annual Income ... £201,000.
Funds in Hand ... £1,026,000.

Premiums Moderate. Losses settled with promptitude and liberality.

Applications for Agencies specially invited from Chemists and Druggists in both Town and Country Districts.

R. HOVENDEN & SONS, BERNERS ST., W.,
AND
CITY ROAD, E.C., LONDON.

REVISED & ENLARGED CATALOGUE

FOR

CONTAINING 432 PAGES AND **1892** NEARLY 1,300 ILLUSTRATIONS,

Post Free on application.

WHOLESALE DEALERS IN AND MANUFACTURERS OF

PERFUMERY, PATENT MEDICINES

DRUGGISTS' SUNDRIES,

FANCY SOAPS, ESSENTIAL OILS,

TOOTH, NAIL and HAIR BRUSHES, COMBS, CUTLERY,

ODORATORS, SPRAYS, &c., MANICURE GOODS,

AND ALL ARTICLES DEALT IN BY CHEMISTS, &c.

PROPRIETORS OF—

THE CHERUB FEEDER
THE EASY HAIR CURLER
GLISSADERMOS
BOGLE'S HYPERION FLUID
BOGLE'S MYSTIKOS

LYOYD'S EUXESIS
THE RAZOR SCISSOR
HOVENDEN'S SHAVING SOAP
HERRING'S MAGNETIC BRUSHES
SWEET LAVENDER PERFUME

MARRIS'S ALMOND TABLETS AND PREPARATIONS
CHURCHER'S TOILET CREAM AND PREPARATIONS
THORNTON'S WALNUT HAIR WASH

SOLE WHOLESALE DEPOT FOR—

BATCHELOR'S HAIR DYE
BOGLE'S MYSTIKOS and HYPERION FLUID
BULLY'S TOILET VINEGAR
CANDE'S LAIT ANTEPHELIQUE
CHURCHER'S DENTIFRICE and MOUTH WASH
CHURCHER'S SPECIFIC
COWVAN'S RAZOR STROPS and PASTE
DORIN'S ROUGES, BLANCS, and all other preparations
FELIX'S EAU DES FEES " "
FRIEDERICH'S (Dr.) HYGIENIQUE PREPARATIONS
KARSWOOD HAIR DYE and WASHES
LEICHTNER'S GREASE PAINTS, & all other preparations
LOZE'S FILTER PAPER

MARRIS'S ALMOND TABLETS, & all other preparations
MECHI'S RAZOR STROPS and Paste
NODA VERITAS HAIR RESTORER
PICARD FRERES' POUDRE D'AMOUR, and other preparations
PINAUD'S PERFUMERY, and all other preparations
PRAY'S (Dr. J. PARKER) MANICURE PREPARATIONS
ROBARE'S AUREOLINE
ROBERT FRERES' PERFUMERY
ROYAL WINDSOR HAIR RESTORER
SCHWARZLOSE'S HAIR DYE
SKINHEAL
VOOGD'S RAZORS, SCISSORS, and all other articles



Dorothy Dentifrice

3d.
PER
PACKET.

An Ideal Tooth Powder.

Dorothy Dentifrice is most attractively put up, and sells readily at sight. It is being extensively advertised in the best publications of the country. Testimonials have been received by the proprietor from the most eminent members of the Dramatic and Musical Profession including Miss Ellen Terry, Mr. Henry Irving, Miss Fortescue, Madame Albani, &c. It is going off well wherever introduced, giving satisfaction to both the trade and the public. It is a profitable line, and is not cut.

2/3 per dozen, 24/- per gross Show Cards with all parcels.

Full particulars of Agencies will be sent to applicants by the Proprietor,
ROSCOE C. SPURIN, 11-13 ST. BRIDE STREET, LONDON, E.C.

WHITE AND SOUND TEETH.

JEWSBURY & BROWN'S

ORIENTAL TOOTH PASTE.



This old-established and increasingly favourite Dentifrice has been over Sixty Years before the Public. It is warranted to retain its properties and keep in good condition in any climate. The original and only genuine is manufactured solely by

JEWSBURY & BROWN, Chemists, MANCHESTER,

and is distinguishable by the Trade Mark, printed in red and green, a facsimile of which is annexed. Particular attention should be paid to this guarantee of genuineness, as numerous imitations are offered. Sold universally by Chemists and Perfumers.

Bills and Showcards forwarded on receipt of Address Cards and directions for enclosure.

H. P. TRUEFITT'S SPECIALITIES FOR THE HAIR.

Floral Extract, 3/6, 5/-,
10/6, 21/-

Egg Yulep, 2/-, 4/
CONCENTRATED

Egg Yulep, 2/6,
5/-, 10/6.

Golden Fluid,

10/6, 21/-

EUXURON,

1/6.

&c.

Stimulating Lotion, 5/-,
10/6.

Astringent and Tonic
Lotion, 5/-, 10/6.

Quinine and Arnica
Hair Wash, 3/6,
5/-, 10/6, 21/-

Arnica Wash,
3/6, 5/-,
10/6.

&c.

EUCHRISMA.
Combines in one clear fluid every valuable
component both of a Hair Dress and Wash.
3/6, 5/-, 10/6, 21/-.

EAU RACINE.
For removing the original colour of Grey Hair;
superior to all other Restorers, being perfectly
simple in its Composition. Price 6/-.

An elegant Preparation for
the Hair and Beard.
Price 2/6, 3/6, 5/-, 10/6, 21/-.

BRILLANTINE

H. P. TRUEFITT'S TONIC TOOTH BRUSH
(BY ROYAL LETTERS PATENT)

PRICE ONE SHILLING.

20 & 21 Burlington Arcade; 13 & 14 Old Bond St., London.

THE NEW PATENT HOLD-STOPPER SMELLING BOTTLE



Exact Size.

MOUNTED IN
**STERLING
SILVER.
HALL-MARKED.**

*Finest English Hand-
made Bottles. Mounts
fixed so that they can-
not come off.*

Price 14/6 per dozen
nett.

Sample free 1/6 stamps.

Of all

Wholesale Houses.

BREIDENBACH & CO.

48 GREEK STREET,

SOHO SQUARE, LONDON, W.

SOZIO & ANDRIOLI

(Alpes Maritimes) **GRASSE** (France). [ESTABLISHED A.D. 1757.]

SPECIALITIES: Oils of Neroly, Lavender, Geranium (twice rectified on Rose Flowers), Thyme (red and white), Spike Lavender, Rosemary, Patchouly, Sandal Wood, &c., &c.

ONLY MAKERS OF THE CELEBRATED ORRIS ROOT OIL, crystallizing at $+15^{\circ}$ Réaumur.

Flowers Pomades at the highest possible Saturation. Best Brand for Orange Flowers and Rose Water. Concentrated Essences, Sweet Almond Oil, &c. Stock kept in London.

London Agent—**MR. FREDK. BOEHM, 4 CULLUM ST., E.C.**

R C TREATT

Dunster House Mincing Lane
LONDON

IMPORTER OF

Musk Civet Ambergris Attar - of - Rose

ESSENTIAL OILS



Wholesale
and
Export
only

APPLICATION

ON

QUOTATIONS

AND

PRICE LIST

TOMBAREL FRÈRES

GRASSE

ALPES MARITIMES



FRANCE

DISTILLERS OF ESSENTIAL OILS

Orange, Rose, and Elder Flower Waters,

MANUFACTURERS OF

FLOWER POMADES, PERFUMED OILS, FLOWER EXTRACTS.

SPECIALITY OF THE HOUSE: CONCRETE FLOWER ESSENCES (ESSENTIAL OILS).

Special Products for Manufacturing Perfumers and Toilet Soap Makers.

ALMOND AND OLIVE OILS.

PRICE LIST ON APPLICATION.

Depot and Agency—**BARLIN & FIELD, 16 MARK LANE, LONDON, E.C.**

WARRICK

WARRICK'S

Real Floral FLAVOURS.

Real Bellitrope, Real Violets, Real Roses, Real Lavender Cachous.

LILAC AND EAU DE COLOGNE PASTILLES.

3/- per lb., richly labelled; 4/- per dozen Boxes, gold embossed on calf.

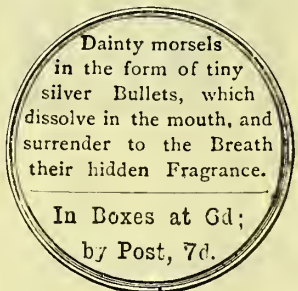
18 OLD SWAN LANE, LONDON, E.C.

BROTHERS.

H.R.H. PRINCE ALBERT'S CACHOUX.



LABELS AND TITLE REGISTERED
ALL ROUND THE GLOBE.



BRITISH MANUFACTURE.
FROM THE LABORATORY OF
THOMAS JACKSON, MANCHESTER.

ONE BY ONE!

PASCALL'S SILVER CACHOUS

BRILLIANTLY POLISHED.

FRAGRANT AROMA.

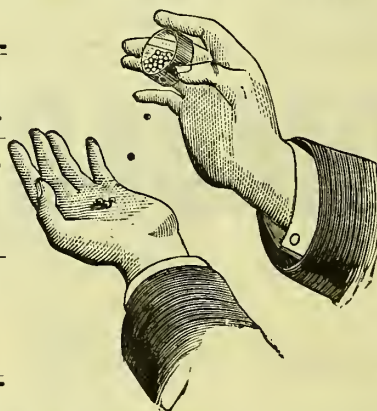
FINEST IN THE MARKET.

IN ROUND PATENT BOXES, MADE TO RELEASE ONE BY ONE.

QUITE
NOVEL

PREFERRED
TO ALL
OTHERS.

In 1 dozen
Outer
Boxes.



Most
Saleable

2/3
per dozen.
In
1-lb. Bottles
3/6
per lb.

Of the usual Wholesale Houses, and of the Manufacturer,

JAS. PASCALL, Blackfriars Rd., LONDON, S.E.

COCKING'S JAPAN OIL OF PEPPERMINT.

Our Extra Steam Refined Oil is treble distilled and twice rectified by steam, by an entirely new process and in apparatus of our own invention, by which all those polymeric products of a tarry and resinous nature which are objected to by some consumers are extracted. It is of water-white colour retaining its full aroma, pungency, and strength, and guaranteed absolutely pure and soluble in spirits of wine.

COCKING'S JAPAN MENTHOL CRYSTALS.

Our Extra Steam Refined quality is in firm, hard, dry, and snowy-white crystals, entirely free from oily contamination, and therefore of the highest melting-point. As the original and largest manufacturers in the world of the true Japan Menthol, we guarantee our brand to be absolutely pure. Beware of substitutes. For full particulars, therapeutic uses, &c., see special circulars, to be had on application.

Sole Agents—**JOHN BATT & CO., 39 OLD BROAD ST., E.C.**

AGENTS APPOINTED
FOR SALE OF
DR. ALLINSON'S
NATURAL FOOD.

The MOST DELICIOUS and LEAST COSTLY, for
BABIES, CHILDREN (any age), INVALIDS, AND ADULTS.

The INVENTION of
DR. T. R. ALLINSON, L.R.C.P.,
The Eminent Hygienic Physician, and Authority on Health and Diet, and each Packet bears his Autograph.
This FOOD is not highly spiced, or chemically prepared, but
A PURE and NATURAL FOOD.
PACKETS, 1d., 3d., 6d., 1s. EACH.

Write for Samples and Prices to

[1]

THE NATURAL FOOD COMPANY,

PETER TYRER, Proprietor,

South Street, Bermondsey, LONDON, S.E.

"PRICE'S
GLYCERINE"

(Originally introduced in 1855).

Guaranteed free from ARSENIC

and all other impurities.

WHOLESALE FROM

PRICE'S PATENT CANDLE CO.
LIMITED,
London, Liverpool, and Manchester.

STEINER'S VERMIN PASTE

FOR DESTROYING

RATS, COCKROACHES, ETC.

IN [TRY IT]

3d., 6d., & 1/ Glass Jars; 2/6 & 5/ Tins.

Warranted to Keep for Export.



STEINER'S VERMIN KILLER

FOR [NEVER FAILS]

DESTROYING

MICE, ETC.

1d., 3d., 6d., and 1s. Packets.



STEINER'S INSECT POWDER
PRIME DALMATIAN.

ENGLISH GROUND.

The most energetic Insecticide.
Kills Bugs, Fleas, and all offensive Insects. Quite harmless to Domestic Animals.

1d., 3d., 6d., & 1s. Tins (& Bellows).

Also in 7-lb. and 56-lb. Tins, and in Kegs of 1 cwt. and upwards.



E. Steiner & Co. are Sole Proprietors & Manufacturers of
JAMES'S PHOSPHOR PASTE

FOR DESTROYING

BEEETLES, RATS, MICE, ETC.

Sold in 1d., 3d., 6d., and 1s. Glass Jars.

May be obtained through all the
Wholesale Houses, or direct from

THE WORKS, LIMEHOUSE, LONDON, ENGLAND.



ARMBRECHT COCA WINE

ITS VIRTUES.

A powerful nerve stimulant. Restores the functions of the digestive organs, strengthens the mental and physical powers, assuages thirst, relieves nervous debility. Given with benefit in cases of opium and morphia habit.

THE ORIGINAL.—The leaves which we always employ are those of **Erythroxylon Coca**, Lamarek. We select them with the greatest care, and ensure by a thoroughly sound process of manufacture that Armbrecht Coca Wine is a true representation of the valuable properties of the drug.

THE FAVOURITE.—The composition of the "medium" wine, which has by far the largest sale of the six varieties, is *our secret*. We introduced this wine, at the suggestion of Dr. Spencer Wells, as a kind of compromise between Malaga, which was generally considered too sweet, and Burgundy, which found some objectors on the score of tartness of taste.

Please use this Order Form.

To Messrs. Armbrecht, Nelson & Co., Duke Street, Grosvenor Square, London, W.

Please send immediately on the receipt of this by _____

SPECIAL PRICE FOR GROSS LOTS.	WHOLESALE.				RETAIL PRICE.		£	s.	d.
	...	Doz. Coca Wine	...	36/0	...	Imperial Pints	...	48/0	doz.
	...	" Coca Burgundy	...	36/0	...	"	...	48/0	"
	...	" Coca Malaga	...	36/0	...	"	...	48/0	"
	...	" Coca Port	...	36/0	...	"	...	48/0	"
	...	" Coca Sherry	...	36/0	...	"	...	48/0	"
	...	" Coca Champagne	...	48/6	...	Quarts	...	56/0	"
	...	" " "	...	26/6	...	Pints	...	33/0	"
	...	" Coca Wine Extract	...	31/6	...	Bottles	...	42/0	"
	...	" " "	...	49/6	...	"	...	66/0	"
	...	" Coca Lozenges	...	13/6	...	Box	...	18/0	"
	...	" " "	...	22/6	...	Tin	...	30/0	"
	PAMPHLETS FOR DISTRIBUTION—NO CHARGE.								

L

IF ORDER BE SENT TO US DIRECT, and REMITTANCE ENCLOSED, we offer a discount of 2½ per cent. single dozen, not less; and 5 per cent. on 3-dozen lots, Carriage Paid England and Wales, and Half Scotland and Ireland.

Name _____

Address _____

EXPORT ORDERS AND INDENTS

For firms in India, the British Colonies, and other parts abroad are executed at a substantial discount. Please order direct (giving references), or through London agents.

SOLE MANUFACTURERS—

ARMBRECHT, NELSON & CO.

Duke Street, Grosvenor Square, London.

Telephone Number, 1852. Telegraphic Address—CHEMICUS LONDON.

ADVERTISERS' AND BUYERS' REFERENCE LIST AND INDEX TO ADVERTISEMENTS.

INDEX TO ADVERTISEMENTS APPEARING IN THIS ISSUE.

NOTE.—The Folios shown in this Index are those at the FOOT of the Page, and not at the Top. This arrangement is necessary in order to meet the requirements of the Post Office.

Foot of Page	Foot of Page	Foot of Page	Foot of Page
Anglo-American Drug Co. (Lim.) 54	Dorothy Dentifrice 20	Keith, B., & Co. 43	Robinson & Sons 59
Apollinaris, The, Co. Cover	Drysdale & Co. 53	Kemphorne, Prosser & Co. .. 43	Robinson, B. 17
Armbricht, Nelson & Co. 28	Eade's Pills 63	Kilner Bros. 57	Rooke, Tompitt & Co. 46
Australian Drug Co. 44	Edwards & Son 47	Lakeman, J. J. 62	Rookledge, J. 64
Ayrtton & Saunders 55	Electrotypes 63	Lalor, Dr. 52	Rowntree & Co. 17
Barolay & Sons (Lim.) 50	Elliman, Sons & Co. Text 582	Langline 31	Sainsbury, S. 62
Barnett & Foster 13	Elliott & Co. 63	Lennon, B. G., & Co. 46	Salomon & Co. 62
Barradell, J. J. 58	Eschmann Bros. & Walsh 63	Leo & Co. 39	Sanger & Sons 48
Barron, Harveys & Co. 17	Evans and Sons (Lim.) Cover	Levermore, A., & Co. 62	Sanitas, The, Co. (Lim.) .. Text 582
Beckett, S. 17	Evans, Lescher & Webb, London	Levy, Julius 46	Schlesinger, L. 62
Berdee & Co. Coloured Supplement	Evans, Sons & Co. (Lim.) Cover	Lincoln Drug Co. 51	School of Pharmacy, The 6
Berend & Co. 59	Exchange Column 10	Lipton's Teas 15	Schweppe & Co. Text 582
Berkfeld Filter Co. 62	Exon, Grimwade & Co. 46	Lloyd, T. Howard, & Co. 37	Seabury & Johnson 65
Berkley, J. 39	Felton, P., & Co. 62	Lofthouse & Saltmer 38	Sheffield College 6
Bishop, A., & Sons 9	Fitch & Nottingham 58	London Homeopathic Hospital	Shipkoff & Co. 28
Bisland & Co. 30	Fletcher, Fletcher & Stevens 63	and Medical School 7	Silverlock, H. 8
Blyton, Astley & Co. 64	Ford, Shapland & Co. Text 582	London & Lancashire Insurance	Smith & Sons 48
Boord & Son 64	Fox & Sons 38	Coloured Supplement	Smith, S., & Co. 27
Bowers Bros. 56	Fuerst Bros. 38	Lorenz, H. 63	"Solezzi" 16
Bowling & Gowler 50	Gilbert, Jno. A., & Co. 61	Lynoh & Co. Cover	Solport Bros. 51
Bow's, Dr., Liniment 12	Giles, Schacht & Co. 29	Mason, C. R., & Co. 59	Soul, W. H., & Co. 44
Braby & Hinchliffe (Lim.) 20	Goodall, Backhouse & Co. 40	Maw, Son & Thompson 59	Southall Bros. & Barclay .. Text 582
Breidenbach & Co. 20	Greiff, R. W., & Co. 40	Mawson, Swan & Waddell 50	Southwell & Co. 10
Brett, F. J. Coloured Supplement	Griffiths, W. 7	May & Baker (Lim.) Cover	Sozio & Andrioli 21
Bromley, C. 63	Grindley & Co. 61	May, Roberts & Co. 5	Sprone, The, Co. 52
Brooks & Co. 62	Guay's Tonic 47	McHenry, J. 63	Steiner & Co. 23
Brooks, T. 28, 62	Halvira, The, Co. 51	Melia, G. 58	Stipendium Stepper Co. 60
Brunner, Mond & Co. 62	Harrison, T. H. 6	Millar, A., & Co. 17	Tangyes (Lim.) 59
Burn, H. 64	Harsoline Pill Co. 28	Morison's Pills 62	Tasmanian Eucalyptus Co. 53
Burroughs, James 10	Herschell, G. 7	Moss, J., & Co. Text 582	Thiellay, E. T. 63
Burroughs Bros. 31, 33, 34	Hicklin, Wilson & Co. 49	Mumford, G. Text 582	Thompson & Capper 38
Burroughs, Wellcome & Co. 62	Holloway, T. 10	Natali, E. 56, 62	Tombarel Frères 21
Bush, A. P., & Co. 14	Hooper, B., & Co. Cover	Newball & Mason 15	Toogood, W. 60
Bush, W. J., & Co. 56	Horn & Son 62	Newsholme, G. T. W. 7	Treatt, R. C. 21
Bygrave, J. & W. 56	Hovenden & Co. 19	Nichols Medical Hall 63	Truefitt, H. P. (Lim.) 20
Caibury Bros. Cover	Houghton, G. & Son 6	Oldfield, Pattinson & Co. 3	Tyrer, P. 23
Chirris, A. 32	Howlett, S. 56	Oppenheimer, Sons & Co. 29	Vaccine Association 51
Christy, T., & Co. 62	Hudson, J., & Co. 62	Pearce, J. 22	Walker, Troke & Co. 10
Cooking & Co. 22	Hulsen, J., & Co. 17	Pearse, A., & F. 35	Warwick Bros. 22
Coleman & Co. (Lim.) 15	Ingram & Royle 12	Petersen, M., & Co. 58	Washington Chemical Co. 48
Crocker, G. B. Coloured Supplement	Isaacs, L., & Co. 58	Pi ch & Co. 63	Wedgwood & Sons 58
Davis, John, & Co. (Lim.) 7	Jackson, T. 22	Pontifex & Wood 59	Westminster College 7
Day & Sons Text 52	Jewsbury & Brown 20	Potter & Clarke 11	White, Fairchild & Co. 10
Dee Oil Co. 53	Johannis Springs (Lim.) 24	Price's Patent Candle Co. (Lim.)	Woodward, W. 28
Delacoe, C. 43	Johansen & Jorgensen 54	Prosser, Taylor & Co. 45	Wright, Layman & Umney ... 34
De St. Dalmas, A. E. 63	Jones & Co. 64	Pynka Syndicate (Lim.) 64	Wyeth, J., & Bros. Text 582
Dodge & Cleott 42	Kay Bros. (Lim.) 52	Raybould, Flesher 63	Wyleys (Lim.) 68
		Richardson, J., & Co. 41	York & Son 6

CLASSIFIED LIST OF ALL ADVERTISERS

Whose Announcements appear in "THE CHEMIST AND DRUGGIST." Those whose Names do not appear in the preceding Index are published in one of the other issues of this month.

ACETIC ACID

Fuerst Bros.
Greiff, R. W., & Co.
Morris & Callard (Salts)

ADVERTISING SPECIALITIES

Lawton, J. W.
Sears, F. W.

AMBER & MINERALS

Apollinaris Co.
Barnett & Foster
Chemists' Apparatus Water Association (Lim.)
Ellis & Son (Bathurst)
Hassall & Co. [Hay, W.
Hulsen, J., & Co.
Idrie & Co.
Ingram & Royle
Jewsbury & Brown
Johannis Springs (Lim.)
Mills & Co. (Bourne)
Schweppe, J., & Co.

BITTO PLANT

See SYNGHON and ESSENCE.]
Barnett & Foster
Braby & Hinchliffe (Lim.)
Gueret Freres
Tyler, Hayward, & Co.

AGENCIES ABROAD

Australian Drug Co.
Kemphorne, Prosser & Co.
Lennon, B. G., & Co. [N.Z.]
Lay, Jules
Peake, Allen & Co.
Prosser, Taylor & Co.
Rooke, Tompitt & Co. (Melbourne)
Sharland & Co.
Soul, W. H., & Co.

ALKALOIDS

Howards & Sons (Cinchona)
Smith, T. & H., & Co.

ALMANACES

Ford, Shapland & Co.
Hildesheimer & Faulkner
Silverlock, H.
Townsend, J.

AMMONIA

May & Baker (Lim.)
White, A., & Sons
Woolley, Sons & Co.

APPARATUS

Hicks, J. J.
Ohlson, A.
Orme, J., & Co. (Scientific)
Perken, Son & Baymont
Pothe, H., & Co.

BAKING POWDER

Goodall, Backhouse & Co.

BANDAGES

Bailey, W. H., & Son
Robinson & Sons
Schutze, F., & Co.
Warne & Co.

BEESWAX

Boehm, F.

BICARB. SODA

Brunner, Mond & Co. (Lim.)
Howards & Sons
May & Baker (Lim.)

BISMUTH PREP.

Hearon, Squire & Francis
Hewlett & Sons
Howards & Sons
May & Baker (Lim.)
Eynes & Co. [Tyrer, T., & Co.
White, Alfred, & Sons

BOOKS

Griffiths, W.
Gurney & Jackson
Hargreaves, Dr., M.D.
Herschell, Dr. [Muter, Dr.

BORAX

Howards & Sons
Mack's Starch

BOTTLES

Aire & Calder Bottle Co. (Lim.)
Barnett & Foster
Barradell, J. P., & Co.
Barrett, E. H.
Braby & Hinchliffe (Lim.)
Bush, H. W., & Co.
Evans, Sons & Co.
Gilbertson, H., & Sons
Hearn, F. A., & Co.
Isaacs & Co.
Johansen & Jorgensen
Kilner Bros.
Pothe, H., & Co.
Shirley, A. W.
Toogood, W.
"W. Brand Bottles"
Youldon, E.

BOXES

Anstett & Co. (Cardboard)
Evans, Sons & Co.
Farmer, J. W., & Co. (Lim.)
Robinson & Sons

BRUSHES

Evans, Sons & Co.

BUNSEN BURNERS

Berend & Co.

BUTTER COLOR, &c.

Boulton, J. & Co. (Lim.)
Crawshaw & Co.
Oldfield, Pattinson & Co.

CAMPOR

Fuerst Bros.
Howards & Sons
May & Baker (Lim.)

CAPSULES

Duncan, (Medicinal)
Duncan, Flockhart & Co.
Evans, Sons & Co.
Hooper, B., & Co.
Mason, C. E., & Co.
Richardson, John, & Co. (Leicester), Lim.

CSCRA SAGRADA

Duncan, Flockhart & Co.
Evans, Sons & Co.
Farris & Co. [Moss, J., & Co.

CASTOR OIL

Allen & Hensbury (Fuerst Bros)
Christy & Co. (Aromatics)
Greiff, R. W., & Co.
The Lofoden Cod Liver Oil Co.

CATALOGUE

Maw, S., Son & Thompson
May, Herbert & Co.
Sanger & Sons

CHECK TILLS

National Cash Till Co.
Patent Voucher Check Till Co. (Lim.)

CHLORIDE OF LIME

Government Sanitary Co.
National Chemical Co.

CHEMICALS

Boehm, F.
Boehring, O. F., & Sohne
Boulton, J., & Co. (Lim.)
Bramwell, E., & Son
Brunner, Mond & Co. (Lim.)
Fletcher Fletcher & Stevenson
Fuerst Bros.
Goodall, Backhouse & Co.
Greiff, R. W., & Co.
Harrington Bros.
Hill, A. S., & Son [Clark
Hodgkingsons, Treacher &
Howards & Sons (Pharm.)
Levermore, Aug., & Co.
Lofthouse & Saltmer
Lorenz, H.
May & Baker (Lim.)
Morris & Callard [Moss
Smith, T. & H., & Co.
Tyrer, T., & Co.
Washington Chemical Co.
White, A., & Sons
Zimmermann, A. & M.

CHEST PROTEIN

Chemists' Association (Lim.)
Hodkinsons, Treacher &
Liverpool Patent Lint Co.
Lynch & Co.
Newbery, F., & Sons
Pattinson, G. [Solport Bros.

CHLORODYNE

Davenport (Browne's
Towle, A. P., & Son)

CHLOROFORM, &c.

Duncan, Flockhart & Co.
Greiff, R. W., & Co.
Macfarlan, J. F., & Son
Salomon & Co. (Lim.)
Smith, T. & H., & Co.
Wright, Layman & Umney
Zimmermann, A. & M.

CITRIC ACID

Hassall & Co. (Phospho)

COCAINE-HYDRO.

Howards & Sons

COCA WINE

Armbrucht, Nelson & Co.

French Hygienic Soc.

Stephen Smith & Co. (Hall's)

COCA & CHOCOLATE

Cadbury Bros. (Christy & Co)

Korntine & Co.

COD-LIVER OIL

Allen & Hanbury

Burroughs, Wellcome & Co.

Evans, Sons & Co.

Greiff, R. W., & Co.

Hill, A. S., & Son

Hookin, Wilson & Co.

Lofthouse & Saltmer

Smith, T. J.

The Lofoden Cod Liver Oil Co.

Colley, Sons & Co.

COFFEE

Sydney, T., & Co. (Coffee)

Essence)

COLDSILB TUBES

Betts & Co.

COMP. MEDICINES

Allen & Hanbury

Blyton, Astley & Co.

Burroughs, Wellcome & Co.

Fuerst Bros.

Hooper, B., & Co. | Leo & Co.

Leo & Co.

Lloyd, T. H., & Co.

CONCENT. LIQS.

Fletcher, Fletcher & Stevenson

Lloyd, T. H., & Co.

Wood, Cooper & Co.

CONFECTIONERY

Blyton, Astley & Co.

Crawshaw & Co.

Gibson, R., & Sons

Gnest, T., & Co.

Pascall, J.

Southwell, C., & Co.

Warrick Brothers

CORN CURRS

Pattison, G.

Solport Bros.

COTTON WOOL

Haynes, G., & Co. (Absorbent)

Robinson & Sons (Absorbent)

Sanger, J., & Sons

Seabury & Johnson

CRSED LIXSEED

Graham, W. G.

Mumford, B. G.

DENTIFRICES

Beecham, T.

Bronnley, H., & Co.

Jewsbury & Brown

Lakeman, J. J.

Quelch, H. C.

Spurin, B. C. (Dorothy)

Stevens, P. A.

Sutton, O., & Co.

Thompson & Capper

Warrick Bros. (Wilson, A.

Woods, W. (Africa Nuts)

DISINFECTANTS

Calvert, F. C., and Co.

Dunex Bros., & Co.

Fletcher Bros., & Co.

Government Sanitary Co.

Grindley & Co. (Lim.)

Jeyes Fluid

Mason, C. E., & Co.

National Chemical Co.

Sanitas Co.

Seabury & Johnson

Star Chemical Co.

Tyrer, Thos., & Co.

DISPENSING**BOTTLES**

The Lofoden Cod Liver Oil Co.

DOG MEDICINE

Spratts Patent (Lim.)

DRUGGISTS' SUP.

Ayrton & Saunders

Bailey, M., & Co.

Barclay & Sons (Limited)

Beauletto Co.

Bush, H. W., & Co.

Chemists' Association (Lim.)

Chemists' Mineral Water

Association (Lim.)

Evans, Leacher & Webb

Evans, Sons & Co. (Savars)

Fordham, W. B., & Sons (Lim.)

Gilbertson, E., & Sons

Hambury & Co.

Hookin, Wilson & Co.

Iris & Co.

Kay Bros. (Lim.)

Lynch & Co. (Lim.)

May, Roberts & Co.

Newbery, F., & Sons

Quelch, H. C.

Sanger & Sons

Schultze & Co.

Siddman & Son

Toogood W.

Wood, Vincent

Young, J.

DRUG MILLS

Burroughs, Wellcome & Co.

DYES, &c.

Crawshaw & Co.

EAU DE COLOGNE

Farina, J. M.

Hookin, Wilson & Co. (Farina)

Martin, Marie (Nun)

Oscar, Moenich & Co.

ELECTRIC APPAR.

Darton, F., & Co.

Gent & Co.

Orme & Co.

EMEROCATION

Burn, H.

Day & Sons

Elliman, Sons & Co.

ENEMAS

Evans, Sons & Co.

Sanger & Son

Warne & Co.

ENGRAVERS

Barker, W., & Son

Corran, J. R.

ESSENCES

Beckett, W.

Mercer, F.

Boehm, F.

Boulton, J., & Co.

Brady & Finchill (Lim.)

Stevenson & Howell

Bush, W. J., & Co.

Fletcher, Fletcher &

Stevenson

Goodall, Backhouse & Co.

Hay, W.

Iris & Co.

May & Baker (Lim.)

Newball & Mason

Oldfield, Patkinson & Co.

Stevenson & Howell

Tyrer, F. (Anchovies)

Tyrer, T., & Co.

Woolley, Sons & Co.

ESSENTIAL OILS

Berger, F.

Boehm, F.

Bush, W. J., & Co.

Chris, A.

Clay, Dod & Co.

Cooking & Co. (Japan Pepper-

mint)

Dodge & Olcott

Evans, Sons & Co.

Goldkingsons, Treacher &

Clarke

Lewis, M.

May & Baker (Lim.)

Robert Freres

Bozio & Andrioli

Schlesinger, L.

Stevenson & Howell

Sykes & Co.

Tombarel Freres

Treat, R. C.

Vogt, G., & Co.

Warrick Bros.

Wright, Layman & Umney

ETHER

Duncan, Flockhart & Co.

Howards & Sons

May & Baker (Lim.)

Robbins, J., & Co.

Tyrer, T., & Co.

White, A., & Sons

Woolley, Sons & Co.

Wright, Layman & Umney

EUCALYPTUS

Downie B. I. P. Co.

Drysdale, J. W., & Co.

Evans, Leacher & Webb

Fletcher, Fletcher & Stevenson

[Co.]

Tasmanian Eucalyptus Oil

Vogt G., & Co.

EXTRACT MEAT

Brand & Co.

Bush's Liquid Beef

Deneayer's Peptone and Ex-

tract of Meat Co. (Lim.)

Iris & Co. (Viking Co.)

Liebig Co.

Liquor Carnis Co. (Lim.)

Mason, G., & Co. (Lim.)

Wyeth, J., & Brother

EXTRACTS, FLUID

Allen & Hanbury

Anderson & Co.

Barber, G., & Co.

Burgoyne, Burbridge & Co.

Evans, Sons & Co.

Fletcher, Fletcher & Stevenson

Hearon, Squire & Francis

Hooper, B., & Co.

Lloyd, T., Howard & Co.

Moss & Co.

Potter & Clarke

Vogt, G., & Co.

Wright, Layman & Umney

FEEDING BOTTLES

Burroughs, Wellcome & Co.

Chemists' Association (Lim.)

Evans, Sons & Co.

Hearn, E. A., & Co.

Hookin, Wilson & Co.

Kliner Bros.

Lynch & Co.

Marriott, E., & Co.

May, Roberts & Co.

Maw, B. Son & Thompson

FILTERING

Berkfeld Filter Co.

Fordham, W. B., & Sons (Ld.)

Mawson, Swan & Weddell

Silicoated Carbon Filter Co.

FLESH GLOVES

Pattison, G.

FLY PAPERS

Ford, Shapland & Co.

Mather, W.

Maw, B. Son, & Thompson

Tunbridge & Wright

Wilson, S.

FOOD (Infants & Invalids)

Allen & Hanbury

Benger's Food

Brand & Co.

Evans, Sons & Co.

Goodall, Backhouse & Co.

Hearon, Squire & Francis

Iris & Co.

Liebig Co.

Liquor Carnis Co. (Lim.)

Nestlé, H.

FORMULA

Brooks, T.

GINGER ALE

Hay, W. (Essence)

Mills, L. M., & Co.

GLYCERINE

Blyton, Astley & Co. (Pastilles)

Boehm, F. | Pink & Co.

Fuerst Bros.

Greiff, R. W., & Co.

Lynch & Co.

Price's Gandle Co.

The Lofoden Cod Liver Oil Co.

GOUT AND RHEU-

MATIC PILLS

Bromley, C.

GRANULAR PREP.

Bishop, A., & Sons

Evans, Sons & Co.

Hearon, Squire & Francis

Lloyd, T. H., & Co.

Wright, Layman & Umney

GRPE WATER

Woodward, W.

GUM

Pink & Co. (Arabic, &c.)

Greiff, R. W., & Co.

Levermore, Ang., & Co.

HAIR PREP.

Anglo-American Drug Co.

Chesbrough Mfg. Co.

Edwards & Co.

Truefit, H. P. (Lim.)

HERBALISTS

Newball & Mason

Potter & Clarke

HERE BEER HITS

Newball & Mason

Oldfield, Patkinson & Co.

Potter & Clarke

HOMOPATHIC

Keene & Ashwell

Leath & Ross

Thompson & Capper

Watson & Wates

HYPHOSPHITES

Duncan, Flockhart & Co.

Fellows

Fletcher, Fletcher & Co.

Sykes & Co.

Tyrer, Thomas, & Co.

INHALERS

Burroughs, Wellcome & Co.

Harkin, Wilson & Co.

Lynch & Co. (Lim.)

Spiron, C., The

Toogood, W.

INK [SEE MARKING INKS]

Bewley & Draper

INSECTICIDES

Keating, T.

Steiner & Co.

INSURANCE

London and Lancashire Fire

Insurance Co.

KETCHUP</

POLISHING

Bradley & Bonder (Litham)
Fleisher, Raybould & Co.
Fordham, W. B., & Sons (Lim.)
Oaker, John, and Sons
Fry & Synnate (Lim.)
Stephens & Co.

PORCELAIN GOODS

Toogood, (E.O. Pots, var'ist.)

POULTRY FOOD

Spratt's Patent (Lim.)

PRECIP. CHALK

Levermore, Aug., & Co.

PRINTING

Bowers Bros.
Corsan, J. R. (Glass)
Ford, Shauland & Co.
Hildesheimer & Faulkner
Silverlock, H. I. Townsend, J.
Townsend, J.

PUMELINE

Stern, G. and G.

QUININE SALTS

Boehringer, C. F., & Sohne
Greiff, R. W., and Co.
Howards and Sons
Zimmermann A. & M.

RENNET

Duncan, Flockhart and Co.
Greiff, R. W., and Co.
Oldfield, Pattinson and Co.

SACCHARIN

Allen and Hanbury
Burroughs Bros.
Burroughs, Wellcome and Co.

SALICIN

Macfarlan and Co.

SALICYLIC ACID

Burgoyne, Burbridge, and Co.

SALT

Forster Bros.
Zimmermann, A. and M.

SALT

Stern, G. and G. (Pepsalis)

SCHOOLS, &c.

City School of Chemistry and
Pharmacy (Lim.)

Liverpool School of Pharmacy

London Homoeopathic and
Medical School

Manchester Col. of Pharmacy

Northern School of Pharmacy

Owens College

Sheffield School of Pharmacy

South London School of
Pharmacy (Lim.)

Royal College of Science

The School of Pharmacy

University of Edinburgh

Westminster College

SAUCES, PICKLES

Goodall, Backhouse and Co.
Mason, G., and Co. (Lim.)
Twyer, P.

SEALING WAX

Savage & Co. (Holder)

SEEDS

Potter & Clarke

SELTZGENES

Brady and Hinchliffe (Ld.)

Evans, Sons and Co.

Fordham, W. B., & Sons

(Lim.)

Lynch and Co. (Lim.)

Jay, Roberts and Co.

SHAVING

Hovenden & Sons (Buxesle)

Lloyd, Mrs. A. S. (Buxesle)

SHIMP DIP

Fletcher Bros. & Co.

Jevons, W. B.

Joyce Sanitary Compounds Co.

SHOP FITTERS

Bowling and Govier

Bygrave, J. and W.

Natall, E.

Probs, H., and Co.

S. Hewitt

Treble, G., and Co.

SOAP

Ayrton and Saunders

Parlay and Sons (Lim.)

Blondeau and Co. (Vinolia)

Bronnley, E., and Co.

Calvert, F. C., and Co.

Cook, E., and Co.

Fordham, W. B., & Sons (Ld.)

Joyce Sanitary Compounds Co.

Mulhens, F.

Pears' Soap

Price, Napoleon, & Co.

Wright, Layman & Umney

SPECTACLES

Botwright and Gray

Darton, F. and Co.

Perken, Son and Rayment

SPONGES

Cresswell Bros. & Schmitts

Evans, Sons and Co.

Peterson, M., and Co.

STAMPS (REVENUE)

Berkley, J.

Hickinson, J.

TARCHE

Chancellor & Co. (Mack's

Double)

Critchley (Gloss)

STOPPERS

Austin and Co. (Sprinklers)

Barnett and Foster

Mellin, C.

Stipendum Stopper Co

STOVES

Clark, S., and Co. (Lim.)

SUGAR

Fletcher, Fletcher and

Stevenson

Gibson, R., and Sons

SUGAR OF MILK

Burroughs Bros.

SULFONAL

Burroughs, Wellcome and Co.

Greiff, R. W., and Co.

May and Baker (Limited)

SURGICAL

Ayrton and Saunders

Bailey, W. H., and Son

Barclay and Sons (Limited)

Cocking, J. T.

Harrison, J. H.

Haywood, J. H.

Krohn and Sesemann

Liverpool Patent Linat Co.

Lindsey & Sons

Powell & Barstow

Quelch, H. C.

Richardson, John, & Co. (Lei-

cester), Lim.

Robinson and Sons

Schutze, F. and Co.

Warne & Co.

Wood, Vincent

SYPHONS

Barnett and Foster

Brady and Hinchliffe (Ld.)

British Syphon Co.

Fordham, W. B., & Sons (Lim.)

Geraut, E., and Co.

Idris and Co.

Kilner Bros.

Mellin, C.

Schweppe, J., and Co.

SYRUPS

Anderson & Co.

Fletcher, Fletcher (Liquers)

Idris and Co.

Wood, Cooper & Co.

TABLETS

Blyton, Astley & Co. (Sulphur)

Corsan, J. R. (advertising)

TEA

Cave, Johnson & Co.

Lowest, Tea Co.

Lipton

Walker and Dalrymple

TEETHING PADS

Marriott, E., & Co.

THERMOMETERS

Bailey, W. H., and Son

Barclay and Sons (Lim.)

Darton, F., and Co.

Evans, Sons and Co.

Hicks, J. J.

Perken Son and Rayment

TOBACCO, CIGARS,

CIGARETTE

Taddy and Co.

TOILET

Allen & Hanbury (Chrisme)

Balm of Bethesda

Burroughs, Wellcome & Co.

(Camoline)

Dee Oil Co. (Lim.)

Hovenden & Sons

Quelch, H. C.

Rowland, A., and Sons

Trewhitt, H. P. (Limited)

TOOTH PASTE

Anglo-American Drug Co.

(Lim.)

Beecham, T.

Jewsbury and Brown

Sutton, O., and Co. (Block)

Wilson, A. (Bunter's)

Woods, M. (Arcra)

TRADE MARKS

Fleuret, J. B.

Horn & Son

Trade Mark Agency

TRUSSES

Bailey, W. H., and Son

Evans, Sons & Co.

Haywood, J. H.

Lindsey & Sons

Wood, V.

URETHANE

Howards & Sons

VACCINATION

Himes, Dr.

Vaccine Association (Lymph

VASELINE

Cheesbrough Manufacturing Co.

VALUERS AND

TRANSF. AGENTS

Berdee and Co.

Brett, F. J.

Crocker, G. B., & Co.

Orridge and Co.

VETERINARY

Bird & Storey, Day and Sea

Day, Son and Hewitt

Elliman, Sons and Co.

James, W. H. (Blister)

Joyce Sanitary Compound

Lloyd, F. Howard & Co.

Rookledge, F. E.

Spratt (Dogs)

Walker, Troke and Co.

Wyley, Lim.

VITOLIN (Superfitt'd)

Blondeau and Co.

WHOLESALE AND

EXPORT DRUGS

Allen and Hanbury

Anderson & Co.

Barron, Harveys and Co.

Battley and Watts

Burgoyne, Burbridge, and Co.

Bush, W., and Co.

Bush, W. J., and Co.

Clay, Dod and Co.

Coward, G. F., & Co.

Deleare, Ch., & Co.

Evans, Sons and Co.

Evans, Lecher and Webb

Ferris and Co.

Fox, W., and Sons

Goodall, Backhouse and Co.

Harker, Stagg and Morgan

Hearon, Squire and Francis

Hewlett and Son

Hill, A. S., and Son

Hodgkinson, Treacher and Co.

Lothhouse and Saltmar

Lloyd, T., Howard and Co.

Macfarlan, J. F., and Co.

Oldfield, Pattinson and Co.

Potter and Clarke

Richardson, J. and Co.

Smith & Sons

Symes & Co.

Thompson and Capper

Walker, Troke and Co.

Willows, Francis and Bnting

Woolley Jas., Sons and Co.

Wright, Layman and Umney

Wyley, Lim.

WINES, SPIRITS

Armbricht, Nelson and Co.

(Goes)

Goodall, Backhouse and Co.

French Hygienic Socy. (Goes)

Idris & Co.

Miller, A., & Co. (Orange)

Robinson, B.

Rose & Co.

HALL'S COCA WINE

A HIGH-CLASS MEDICATED WINE AT A REASONABLE PRICE

THE LATEST TESTIMONY TO THE EXCELLENCE OF
HALL'S COCA WINE.

"The Lancet," April 9th, 1892.

HALL'S COCA WINE (STEPHEN SMITH & CO., BOW, E.)

This is an excellent Wine, with an alcoholic strength equal to good port, possessing a similar flavour and bouquet, but associated with it also is the peculiar though pleasant aroma of the fresh Coca leaf. Ether when shaken with the Alkalised Wine yielded a residue on evaporation which with hydrochloric acid gave characteristic Crystals of Cocaine hydrochlorate; they were further identified by the numbing effect produced by the Crystals when rubbed on the tip of the tongue. Analysis gave the following data: Alcohol, 15 per cent. by weight, 18.50 per cent. by volume; total solid matter, 18.73 per cent. (sugar and coca principles); mineral matter, 0.33 per cent. The restorative and invigorating properties of the Coca leaf are now well known, and it may be very conveniently and palatably administered in the form of an agreeable Wine such as that under examination, a wineglassful of which is stated to contain one drachm of the soluble active ingredients of the leaves.

STEPHEN SMITH & CO., BOW, LONDON.

WOODWARD'S

"GRIPE WATER"

TRADE MARK.



NOTICE

The Proprietor guarantees
that
"WOODWARD'S GRIPE WATER"
contains NONE of the
SCHEDULED POISONS.

FOR WHOLESALE AND SHIPPING TERMS APPLY

THE PROPRIETOR, CHAUCER STREET, NOTTINGHAM.

PURE OTTO OF ROSE,

SPECIALITY OF

SHIPKOFF & CO.

DISTILLERS AND EXPORTERS,

KIZANLIK, BULGARIA.

Agent for Great Britain—G. P. BAKER, 19 Ivy Lane,
LONDON, E.C.

THE OTTO OF ROSE which this house distills and exports is known
above all by the absolute purity of its quality and the unexcelled
sweetness and strength of its odour. It is guaranteed to be the finest
essence produced in the famous Rose Valley of Bulgaria.

Shipkoff's Brand received the only award for Otto of Rose at the
Paris Exhibition.

LUCKY HITS.

Tom Brooks's "SWEET SOLID PERFUMES" are daily
growing more popular, and, as they pay HALF PROFIT, every
chemist should handle them. Six odours, enchanting and
delicious. Retail 2d. each. Trade price, 12s. per gross.
Packed in two-dozen (elasticated) show-boxes. Six dozen
orders 6s, carriage paid.

"SWEET MAY BLOSSOM," a 6d. Tablet, packed in
fancy Japanese basket. This is also a disinfectant, which
no lady's wardrobe should be without, as it kills moths and
prevents contagion. Price 3s. 6d. per dozen; half-dozen
sample free 2s.

SOMETHING NEW.—Untarnishable Silver Price-
Tickets for chemists, neat, novel, and attractive. Two
series—M, 3d. to 3s.; N, 6d. to 6s. Price 1s. 6d. per gross
box, assorted, carriage paid. Sample free.

WIDE-AWAKE CHEMISTS, make your own Pro-
prietaries. If you require genuine well-tried recipes, try
BROOKS'S, which have stood the test over thirteen years and
had an increasing sale. IT IS A FACT that a Chemist in
Lancashire made 5l. profit in a month by one recipe. Follow-
ing are specially recommended as a trial:—"TIC SPECIFIC."
—Acts like magic. Cures after Tonga and Tikbeel fail.
There is a fortune in it. "TRIXY."—New, delicious, and
enchanting bouquet. Suitable for local name perfume.
"GLYCERINE CREAM."—Most elegant and excellent toilet
requisite; softens and whitens the skin; most perfect pre-
paration in the market.

A PHYSICIAN'S PRESCRIPTION FOR SPERMA-
TORRHEA.—Over 100 cases of this fearful disease have
been cured by this remedy. It contains a mixture and two
kinds of pills, with full directions for use. Original recipe
cost Five Guineas.

Recipes 1s. 1d. each; three for 2s. 6d., post free. List of 400 others free.

TOM BROOKS, Chemist, Hornsey, LONDON, N.

HARROLINE PILLS.

The Great Harrogate Tonic.

An unfailing Cure for Poverty
of Blood, Anæmia, Chlorosis,
and every form of Debility arising
therefrom.

1s. 1d. and 2s. 9d.

WHOLESALE FROM THE
HARROLINE PILL CO.
HARROGATE.



FULL PARTICULARS & TERMS ON APPLICATION

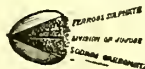
“Among recent improvements in Pharmacy there is none more ingenious, meritorious, or practically useful than ‘Palatinoids.’”—Hospital Gazette.

We are willing to co-operate with any enterprising Chemist for the patronage of his local medical men. “Palatinoids” and “Bi-palatinoids” are increasing in sale and favour wherever introduced. They are the most scientific forms of medication ever invented. This point cannot be disputed, for the testimony of the Medical Profession and Press upon this point is conclusive.

WE DO NOT ASK CHEMISTS TO WORK FOR NOTHING.

Our goods all bear the usual dispensing margin of profit. They occupy but little space in your pharmacy, and are as equally attractive as they are saleable. We have to thank the Trade for the kindly interest displayed towards us and our goods, to which we feel is due, in no small measure, the present popularity of “Palatinoids” and “Bi-palatinoids.”

‘PALATINOID’ & “PALATINOID” “BI-PALATINOID” “BI-PALATINOID”
‘BI-PALATINOID’ OPENED. (FERROUS CARBONATE) (FERROUS PHOSPHATE)



Before immersion in water.

After three minutes' immersion in water at normal temperature of stomach.

OPPENHEIMER, SON & CO., LTD., 14 WORSHIP STREET, E.C.

Schacht's Preparations.

SCHACHT'S LIQUOR BISMUTHI.

Absolutely pure. The original preparation, invented and introduced to medicine by Mr. Schacht in 1855. Its distinct superiority is universally admitted. In $\frac{1}{2}$ lb., 1 lb., 2 lb., and 5 lb. bottles. Dose: 1 drachm diluted. When ordering, please to specify “SCHACHT'S.”

SCHACHT'S LIQ. BISMUTHI SEDATIVUS.

Contains pure Bismuth and *Pepsina Liquida* in combination with sedatives. A formula most serviceable in the treatment of gastric pain. In 4 oz., $\frac{1}{2}$ lb., and 1 lb. bottles.

SCHACHT'S SYR. CINCHONÆ ALCOHOLICUS.

A standard preparation, of definite alkaloidal strength, containing the entire medicinal properties of the finest Cinchona Bark. It is, in fact, Bark minus the woody fibre, and its efficiency has been proved by careful medical enquiry. Dose: Ten to sixty drops.

SCHACHT'S PEPSINA LIQUIDA (REGISTERED TITLE).

Fluid pepsine of extraordinary activity—tasteless, odourless, attractive to patients, and reasonable in price. Every teaspoonful when tested by the official B.P. process is guaranteed to effect the solution of 1,000 grains of albumen. Peptic power is the only test of value. Most of the foetid and repulsive dry Pepsines have proved worthless. In 4 oz. bottles, 2s. 6d. each; and larger sizes for dispensing at a cheaper rate.

SCHACHT'S PEPSINA LIQUIDA C. BISMUTHO.

Each drachm contains in a concentrated form, besides the fluid pepsine a full dose of Schacht's Liquor Bismuthi. Dose: One drachm. In $\frac{1}{2}$ lb. and 1 lb. bottles.

N.B.—Peps. Liq. c. Bismutho Co. contains, in addition, one gr. soluble Euonymin in each drachm.

SCHACHT'S PEPSINA LIQUIDA C. EUONYMIN.

Each drachm contains one grain of soluble Euonymin. Dose: One drachm. For dispensing $\frac{1}{2}$ lb. and 1 lb. bottles.

SCHACHT'S LIQ. PODOPHYLLI C. BISMUTHO.

A perfect solution of Podophyllin, containing $\frac{1}{2}$ gr. in each drachm.

SCHACHT'S LIQUOR CASCARÆ DULCIS.

A pleasant and active form of Cascara Sagrada. Dose: One to three teaspoonfuls diluted. In 4 oz., $\frac{1}{2}$ lb. and 1 lb. bottles.

SCHACHT'S INFALLIBLE RENNET.

An entirely new Essence, perfectly reliable, for the coagulation of Milk, and the production of Junkets and Curds and Whey. It is a preparation of the most wholesome nature, that contains no salt, and has no special taste, smell, or colour. In large bottles at 1s. of any Chemists. This Essence keeps well in any climate.

The above Preparations can be procured from Messrs. Barclay & Sons, W. Edwards & Son, and the Wholesale Druggists, or direct by post from

GILES, SCHACHT & Co., Clifton, Bristol.

TELEGRAPHIC ADDRESS—"TROCHES MANCHESTER."

JUJUBES & PASTILLES

SEASON 1892.

WE invite the attention of Chemists to our products in this department. We court a business-like comparison with other makers, both in the matter of quality and prices, and for this purpose will send Free Samples to any qualified Chemist upon receipt of business card. We think the public would rather purchase these goods from the Chemists than from Grocers, Confectioners, and other outside distributors, and although we neither call upon these nor solicit their favours in any manner whatever, we have from time to time to decline their orders, because we manufacture for the Drug Trade only. We respectfully ask Chemists to support us in our endeavour to keep within the proper channel of distribution those lines which may be fairly considered to belong to the legitimate trade. As intimated above, our prices are not higher than those makers who sell their wares indiscriminately, and we leave our Free Samples to be judged upon their merits.

BLYTON, ASTLEY & CO.

MANUFACTURING PHARMACISTS, MANCHESTER.

PLEASE WRITE FOR OUR GENERAL PRICE LISTS. PERUSAL WILL REPAY YOU.

"LANOLINE"

Every Chemist

SHOULD USE

"LANOLINE" AS AN OINTMENT BASE,

AS IT

never turns rancid;

admits of the admixture of any quantity of water;

confers stability and permanence on ointments prepared with it.

UNGUENTUM LANOLINI

is an Ointment

WHICH CONSISTS OF

"LANOLINE" and 30 per cent. of Soft Paraffin B.P.

UNGT. LANOLINI is comparatively inexpensive.

UNGT. LANOLINI is non-sticky.

TOILET "LANOLINE."

A SUPERIOR PREPARATION FOR THE SKIN.

IN TUBES CONVENIENT FOR USE IN

**SUNBURN, CHAFING, CHAPPING, REDNESS, AND
WRINKLING OF THE SKIN.**

"LANOLINE" and its preparations, Soaps, Pomades, &c., can be obtained from

BURROUGHS, WELLCOME & CO.

SNOW HILL BUILDINGS, LONDON, E.C.

TWO GRAND PRIZES AT THE PARIS EXHIBITION, 1889 (Highest Distinction Awarded).
ESTABLISHED A.D. 1768.

ANTOINE CHIRIS,

GRASSE (Alpes-Maritimes), FRANCE,

WHOLESALE MANUFACTURER OF

POMADES, ESSENTIAL OILS, DISTILLED WATERS,

&c., &c.

STEAM WORKS IN GRASSE AND BOUFARIK (ALGERIA.)

GRASSE, July 28, 1892.

'MUSK BAUR' V. 'TONQUINOL'

CAUTION TO THE TRADE.

THE Proprietors of BAUR'S Patent for the manufacture of Artificial Musk having instituted proceedings before the Tribunal at Leipzig, against the Firm of VALENTINER & SCHWARZ, of Leipzig-Plagwitz, for a violation of their Patent Rights, consisting in the Manufacture and Sale of a Musk substitute offered by them under the name of "TONQUINOL."

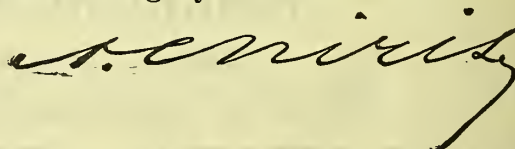
At the commencement of these proceedings, Messrs. VALENTINER & SCHWARZ exerted themselves to make those interested believe, by means of numerous circulars and advertisements, that their process of manufacture of Artificial Musk was, and is, essentially different from the process patented by "BAUR," and that their action was therefore legitimate.

The Leipzig Tribunal on July 14, 1892, delivered judgment, of which the following is an extract:—

"The Defendants (Messrs. VALENTINER & SCHWARZ) are condemned to discontinue the Manufacture or Sale of Artificial Musk during the whole time the 'BAUR' Patents remain in force, under penalty of a fine of One Thousand Marks for every contravention. . . . This judgment to take effect immediately, notwithstanding appeal."

In consequence, the Manufacture and Sale of any Artificial Musk, other than "Musk Baur" is prohibited.

As the exclusive vendor of "Musk Baur," I beg to renew my offers of service; you will obtain from me the only Artificial Musk which can legally be manufactured and sold.



Sole Agent (for Great Britain only)—

CHARLES WESTPHAL, 195 UPPER THAMES STREET, LONDON, E.C.

Telegraphic Address—"PATCHOULY LONDON."

SOLUBLE "TABLOIDS" OF COMPRESSED DRUGS.

VOICE "TABLOIDS,"

Composed of COCAINE, Chlorate of Potash, and Borax.

Impart a clear and silvery tone to the voice, are easily retained in the mouth while singing or speaking, and are now used by the leading singers and public speakers throughout the world.

DIRECTIONS.—A single "Tabloid" may be slowly dissolved in the mouth to remove huskiness or hoarseness.

Supplied to the Trade in beautifully graven white metal boxes, blue silk label, at 8s. and 16s. per doz. Retail prices, 1s. and 2s. per box.

NASO-PHARYNGEAL "TABLOIDS."

CONTAINING SODIUM CHLORIDE, BORAX, BORIC ACID, BENZOIC ACID, MENTHOL, THYMOL, OL. GAULTHERIE, AND COCAINE MURIATE.

Alkaline and Antiseptic.

Dr. MACNAUGHTON JONES' formula for an antiseptic and detergent mouth lotion, gargle, spray, or irrigation solution for the nares. The difficulty experienced in obtaining solutions, which will not undergo decomposition, for these purposes is well known.

A "Tabloid" makes a perfect solution (Cocaine 1 in 6000) in half a small wineglassful of *tepid water*, and such solution may be used as gargles or mouth-lotions. In irritable conditions of the anterior nasal mucous membrane a small quantity of the solution may be sniffed or syringed up the nostrils.

The "Tabloids" are very readily dissolved without crushing, and are convenient and portable.

Naso-Pharyngeal "Tabloids" are supplied to the Trade in bottles of 25 and 100, at 12s. and 30s. per doz.

CHLORATE OF POTASH "TABLOIDS."

FOR AFFECTIONS OF THE VOICE, THROAT, AND RESPIRATORY SURFACES GENERALLY.

By using the "Tabloids" the drug is effectually brought in contact with the oral mucous surfaces as a continuous gargle, and its specific action is made certain. In acute sore throat, Chlorate of Potash "usually relieves the uneasiness in a few hours" (Cohen). "It is used in ulcerated mouth and follicular pharyngitis, and has been employed in croup, diptheria, and spasm of the larynx" (Brunton).

"Of convenient size, they are *beautifully made*; and, as they dissolve slowly in the mouth, are well suited for throat affections."—THE LANCET.

Supplied to the Trade in beautifully graven white metal boxes, blue silk label, at 4s. and 7s. 6d. per doz.

ICHTHYOL "TABLOIDS."

(Plain and Sugar-coated.)

At the suggestion of several leading physicians we have prepared "Tabloids" of Ichthyol containing 2½ gr. each, which for the internal administration of Ichthyol are perhaps the most convenient form that can be prescribed. The drug Ichthyol is now prescribed both internally and externally, in cases of acne rosacea, eczema, urticaria, lichen urticatus, erythema, multiforme et nodosum zoster, dermatitis herpetiformis in the chronic form, &c.

Ichthyol "Tabloids" supplied to the Trade in bottles of 24 and 100, at 7s. 6d. and 24s. per doz.

SULPHONAL "TABLOIDS."

This salt, unlike opium and morphine, does not compel sleep, but induces it in a pleasant manner, and is attended by no toxic symptoms. Dr. Lander Brunton (Croonian Lecture, 1889) says: "Obioral depresses the heart's action. Paraldehyde imparts a disagreeable odour to the breath for some time after administration. Sulphonal possesses the properties of an ideal sedative, acting only as a hypnotic to the sensory nerves without affecting the other tissues, and does not require increasing doses to produce calm and refreshing sleep. Sulphonal is a soporific affecting neither digestion, pulse, nor temperature, very efficacious in insomnia and sleeplessness of nervous subjects."—BRITISH MEDICAL JOURNAL, vol. i. 1888, fol. 864.

Sulphonal supplied to the Trade in bottles of 25 and 100, at 8s. 6d. and 24s. per doz.

CASCARA SACRADA "TABLOIDS."

(Plain and Sugar-coated.)

Are an elegant form for prescribing this otherwise nauseous drug. They are active readily disintegrated in the stomach, and are therefore thoroughly reliable.

Supplied to the Trade in bottles of 25 and 100, at 7s. 6d. and 22s. per doz.

"TABLOIDS" OF COMPRESSED DRUGS PREPARED BY BURROUGHS, WELLCOME & CO.

Aconite Tinct., 1 min.
Aloin, 1/10 gr.
* Aloin Compound—Anti-Constipation (Aloin, 1/51 gr.; Belladonna Ext., 1/8 gr.; Strich., 1/100 gr.; Ipecac., 1/116 gr.)
Ammon. Bromide, 5 and 10 gr.
Ammon. Chloride, 3, 5 and 10 gr.
Ammon. Chloride with Borax.
Antac'd (Calcium. Carb. Precip., 2½ gr.; Magnes. Carb., 2½ gr.; Sodium Chloride, 1 gr.)
Anticongestion (see Aloin Comp.)
Antifebrin, 2 gr.
Antimony Tartarated, 1/50 gr.
Antipyrin, 5 gr.
Apomorphia Mur., 1/50 gr.
Arsenious Acid, 1/100 and 1/50 gr.
Atropia Sulph., 1/100 gr.
Belladonna Tinct., 1, 5, and 15 min.
Bismuth Subnitrate, 5 and 10 gr.
Bismuth and Soda, 5 gr. (2½ gr. Blue Pill, 3 gr. [each].)
Borax, 5 gr.
Caffein Citrate, 2 gr.
* Calcium Sulph. (plain and sugar-coated), 1/100 gr.
Calomel, ½ and 1 gr.
Camphor Comp. Tinct. (Paregoric), 5 and 15 min.
Cannabis Indica Tinct., 3 min.
Capsicum Tinct., 1 min.
* Cascara Sacrada Ext., 2 gr.
* Cascara Comp. (Cascara Dry Ext., 1 gr.; Eucalyptin ½ gr.; Hyoscyamus Dry Ext., 1/3 gr.; Nux Vomica Ext., 1/16 gr.)
* Cathartic Comp. U.S.P., plain and sugar-coated (Ext. Coloc. Co. Pulv., 1/3 gr.; Ext. Jalape. Co. Pulv., 1/3 gr.; Hyd. subchlor., 1 gr.; Camphor Pulv., ½ gr.)
Charcoal (Pure Willow), 5 gr.
Chloralamid, 5 gr.
Chloral Hydrate, 5 and 10 gr.
Cocaine, 1 gr. (see Voice).
Cocaine with Potash and Borax
Oreta Aromat. cum Opio Pulv., 5 gr (Aromatic Confection with Opium).
Cubeb. Comp. (Cubeb. Pulv., 2 gr.; Amom. Chlor., ½ gr.; Ext. Glycyrrh.).
Dialysed Iron, 10 min.
Digitalis Tinct., 1 min.
Digitalin, 1/100 gr.
Diuretin—Knoll's, 5 gr.
Dover Powder (see Ipecac. and Opium).
Ergotin (sugar-coated), 3 gr.
Euonymin Resin, 1/8 gr.
Euxalin, 2 gr.
Ferrum Redact (see Reduced Iron).
Gregory Powder (see Rhubarb Comp. Pulv.).
Guaiacum and Sulphur, aa 3 gr.
Hydrarg. cum Oreta, ½ and 1 gr.
Hydrarg. cum Oreta, 1 gr.; with Dover Powder, 1 gr.
Hydrarg. Iod. Mur., 1/20 gr.
Hydrarg. Iod. Vir. (Proto-Iodide of Mercury), 1/8 gr.
Hydrarg. Perchlor., 1/100 gr.
Hydrarg. Subchlor., 1/10 gr. (see also Calomel, 1 gr.).
* Hydrastia Comp. (Hydrastia Mur., ½ gr.; Ergotin, ½ gr.; Canabin Tannate, ½ gr.).
Hydrinaphthol, 3 gr.
* Ichthyol, 2½ gr.
Ipecac. and Opium, 2, 5 gr. (Dover Powder).
Ipecac. Powder, 1/10 and 5 gr.
Ipecac. Pulv., 2 gr. cum Antim. Tart., aa 1/100 gr.
Iron and Arsenic Comp. (Quinine Bisulph., 1 gr.; Iron Hypophosph., 2 gr.; Arsenic, Strichaine Sulph., aa 1/50 gr.).
Iron and Quinine Cit. (plain and sugar-coated), 3 gr.
* Laxative Vegetable, plain and sugar-coated (Res. Podoph., Ext. Hyosc., Ext. Berz., aa 1/4 gr.; Ext. Coloc. Pulv., 1 gr.; Ext. Jalape. Pulv., Res. Lepid., aa 1/2 gr. Ol. Ment. Pip.).
Lithia Carbonate, 2 gr.
* Lithia Comp. (Lithia Benzoas, 3 gr.; Sulphur Precip., 2 gr.; Quin. Solut., 1/3 gr.). Dr. Hugh Laue's formula.
Manganese Dioxide, 2 gr.
Monophosph. (20 and 1/8 gr.
Nasol. A. Kalline (Borax, 5 gr.; Soda Chlor., 5 gr., effervescent).
Nasal, Antiseptic and Alkaline (Soda Bic., 5 gr.; Acid. Carb. ic., 1/2 gr.; Borax, 5 gr.).
Naso-pharyngeal Sodium Chlorid., Borax, Boric Acid, Benzoic Acid, Menth., Thymol, Cocaine Mur., Ol. Gaultherie, Dr. Macnaughton Jones' formula.
Nitroglycerine, 1/100 gr. (see also Trinitrine).
Nux Vomica Tinct., 1, 3, & 10 min.
Opium Tinct. (Laudanum), 2 min.
Opium Tinct., 2, 5, and 10 min.
Opium, ½ gr.
Pancreatin (see Zymine "Tabloids").
Papain, 2 gr. (Dr. Finkler & Co.).
Paregoric (see Amph. Co. Tinct.).
Pepsin (Fairchild).
Pepsin Saccharated, 5 gr.
Peptonic, 3 gr. (Pepsin, Pancreatin, Lactophosph. Laine, p. aeg.).
* Peptonic (new in proved, 4½ gr. (Zymine, 1½ gr.; Calc. Lactophosph., 1½ gr., coated with Keratin. Pepsin Pure (Fairchild), 1½ gr. is then added, and the compound "Tabloid" coated with pure white sugar).
Phenacetin, 5 gr.
Phloerapin Mur., 1/20 gr.
Podophyllin Resin, 1/4 gr.
Potass Bicarb., 5 gr.
Potass Bromide, 5 and 10 gr.
Potass Chlorate, 5 gr.
Potass Chloride with Borax.
Potass Iodide, 5 gr.
Potass Nit. (Sal Prunella), 5 gr.
Potass Permanganate, 1 and 2 gr.
Quinine Bisulphate, ½ and 1 gr.
* Quinine (Bisulph.), 1, 2, 3, and 5 gr.
Quinine Sulphate, plain and sugar-coated, same strengths, sizes, and prices as Quinine Bisulphate.
Reduced Iron, 2 gr.
Resorcin, 3 gr.
Rhubarb Comp. (Pil.), 3 gr. (Rhet Pulv., 1½ gr.; Aloes Soc. Pulv., 1 gr.; Sassafras Pulv., 1/8 gr.; Myrrise Pulv., 5/8 gr.; Ol. Ment. Pip.).
Rhubarb Comp. Pulv. (Gregory Powder), 5 gr.
Rhubarb and Soda, 5 gr. Rhet (Sugr., Soda, 2 gr.; Zingiber, ½ gr.)
Rhubarb, 3 gr.
Sacharin, ½ gr.
Salcin, 5 gr.
Saliol, 5 gr.
Santonin, ½ gr.
Soda Bicarbonate, 5 gr.
Soda Dithio-salicylate, 5 gr.
Soda-Mint or Neutralising "Tabloids" (Soda Bicarb., 4 gr.; Ammon. Carb., 1 gr.; Ol. Ment. Pip.).
Soda Salicylate, 3 and 5 gr.
Stomachic Comp. (Infusion Gentian Co., 2½ dr.; Infusion Rhet, 2½ dr.; Soda Bic., 5 gr.; Ol. Ment. Pip., 1/2 gr.).
Strophanthus (2 minims of Tinct. Sulphonal, 5 gr. (in each).
Sulphur Comp. (Sulph. Precip., 5 gr.; Potass. Bismuth, 1 gr.). Sir A. Ga. rod's formula.
Tannin, 2½ gr.
Test Tabloids for prep. Fehling's Sol.
Tonic Comm. (Iron Pyrophos., 2 gr.; Quinine, 1 gr.; Strich., 1/100 gr.).
Trinitrine (Nitroglycerine), 1/100 and 1/50 gr.
Trinitrine and Amyl Nitrite.
Trinitrine Comp. (Trinitrine, 1/100 gr.; Nitric of Amyl, ½ gr.; Capsicum, 1/50 gr.; Menth., 1/50 gr.).
Urethane, 5 gr. (Cocaine).
Voice (Potash, Borax, aa 2½ gr. and Warburg Tincture, 30 min. in each. Zinc Sulphate, 1 and 10 gr.
Zinc Sulpho-carbolate, 2 gr.
Zingib. Kort. Tack., 5 min.
Zymine (Fairchild).
Zymine Comp. (Fairchild) (Zymine, 2 gr.; Bismuth Subnit., 3 gr.; Pulv. Ipecac., 1/10 gr.).

Those "Tabloids" marked with an asterisk are coated with a perfectly soluble coating of pure white sugar. These coated "Tabloids" WILL ONLY BE DISPENSED BY CHEMISTS WHEN SPECIALLY INDICATED BY THE PHYSICIAN.

BURROUGHS, WELLCOME & CO., SNOW HILL BUILDINGS, LONDON E.C.

PORTABLE MEDICINE CHESTS & CASES

(B., W. & CO.)

These Medicine Chests and Cases, fitted with Tabloids of Compressed Drugs, Concentrated Medicines, and Surgical Appliances, are manufactured in all sizes, from a tiny Pocket Case, containing five 2-drm. bottles, to the **Congo Medicine Chest**, holding thirty-six 4-oz. bottles, as supplied to Mr. Stanley, Emin Pasha, and others. These Cases are very portable and convenient for Travellers, Explorers, Medical Men, and Families.



B. W. & Co. "Congo" Medicine Chest.
As supplied to Mr. H. M. Stanley and others. Weight of case when fitted with "Tabloids," about 40 lbs.

COMPLETE PRICE LIST ON APPLICATION.

BURROUGHS, WELLCOME & CO., Snow Hill Buildings, LONDON, E.C.

Telephone :
4608.

PERFUMES.

Telegrams :
'Umney London.'

FINEST CONCENTRATED.

COMPOUNDED FROM CHOICEST FRENCH POMADES AND ESSENCES.

WRIGHT'S "ESS. BOUQUET,"

White Rose, White Lilac, White Heliotrope, Lily of the Valley.

WRIGHT, LAYMAN & UMNEY, Southwark, LONDON.

AWARDS AND APPOINTMENTS TO DATE: { Diploma d'Honneur, Rosendael, 1891. Royal Naval Exhibition, 1891. Gold "Medal," Brussels, 1891. Sole Contractors to "VENICE IN LONDON," 1892.

"Johannis"

KING OF TABLE WATERS. CHARGED ENTIRELY WITH NATURAL GAS.

—PREVENTS—

GOUT, RHEUMATISM, AND INDIGESTION.

MIXES EQUALLY WELL WITH WINES, SPIRITS, OR MILK.

The finest tribute ever accorded to sterling merit is contained in *The Lancet* of August 8, 1891, pages 307-8, which embodies the "Report of *The Lancet* Special Commission on Natural Mineral Waters," "**JOHANNIS**"—the subject of the Report—being selected from amongst the Natural Mineral Waters of the world as alone worthy of this unprecedented distinction.

"Johannis" SPECIALTY FOR 1892. { The QUARTER BOTTLE contains 7 fluid ounces—equivalent to a small tumbler full.
Sample Cases of 100, 25s., Packing and Bottles included.
SUPPLIED AT ALL FIRST-CLASS HOTELS, CLUBS, AND RESTAURANTS.

50 Bottles, 22s.; 100 Half-Bottles, 35s.; 100 Quarter-Bottles, 25s. Bottles, packing, and delivery included.

THE JOHANNIS COMPANY, LIMITED, Stores—25 REGENT ST., LONDON, S.W.



ESTABLISHED 1859 AS A MONTHLY. SINCE MARCH, 1886,
A WEEKLY JOURNAL.

PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICE, FINK'S BUILDINGS, MELBOURNE,
AUSTRALASIA.

Subscription 10s. per year, payable in advance, including a copy of THE CHEMISTS' AND DRUGGISTS' DIARY next to be published, post free to every country in the world. New subscriptions should date from the commencement of any month.

Supplied only to persons connected with the Trade.
Single copies 4d. each.

Cheques and Postal Orders should be payable to EDWARD HALSE, and crossed MARTIN'S BANK (LIMITED).

Literary Contents.

	PAGE		PAGE
Bankruptcy Reports	593	Gazette	593
Business Chances	575	Irish News	571
Chemists' Assistants' Association	575	Legal Reports	579
Commentary	565	New Companies	589
Company Meeting	590	Personalities	588
Corner for Students	568	Pharmaceutical Society of Great Britain:—	
Correspondence:—		Preliminary Examination Questions	574
Is Water-analysis a Failure?		October Examination Results	575
Liquid Extract of Cascara;		Pharmaceutical Society of Ireland:—	
Orinous Lin.e-water; The		Council Meeting	576
Major Examination, &c.	585	Preliminary Examination Questions	578
Dispensing Notes	596	Reviews	585
Legal Queries	586	"Scientific Mysteries"	586
Miscellaneous Inquiries	597	Scotch News	571
Editorial Comments:—		Trade-marks Applied for	583
Work at Somerset House	582	Trade Notes	589
Wanted: A Science Reform	583	Trade Report	590
The Vivisection Debate	584		
English News	569		
Foreign and Colonial News	580		
French Pharmaceutical News	572		

Summary.

A CASE is reported from Hastings of a conviction under the Poisoned Grain Act.

DR. J. C. THRESH and MR. D. B. DOTT contribute letters on the water-analysis discussion.

THE competitors in the Corner for Students have done fairly well this month with an alloy.

LEAD-TAINTED tartaric acid has been the subject of several prosecutions in Glasgow, which are not yet settled.

A TORONTO Magistrate has fined a limited company for selling chlorodyne and keeping open shop for the sale of poisons.

AT a meeting of the Institute of Chemistry it was resolved to purchase a house near Bloomsbury for offices, examination-hall, &c.

WE print the questions set at the Pharmaceutical Preliminary examinations in Great Britain and Ireland this month, also the results of the English Minor and Major.

A PATENT-MEDICINE vendor at Huddersfield has been fined for selling a stamped medicine from a shop for which he had not a licence. He had a licence for other premises in the town.

WE give fuller particulars of the prosecution of the wife of an unqualified vendor of poisons by the Pharmaceutical Society under the Pharmacy Act at Birmingham, which we reported briefly last week.

AT the annual meeting of the Federation of Grocers' Associations a resolution in favour of contending for the legal right of grocers to sell stamped proprietary medicines containing poisons was adopted.

IT will be seen from our report of the American Wholesale Druggists' Convention that manufacturers, wholesale dealers, and retailers of proprietary medicines have arrived at an agreement in regard to cutting.

IN a case involving the question of liability for the carriage of oil of peppermint, Mr. Commissioner Kerr has made some characteristic remarks on the way shipowners contract themselves out of liability for damage.

MR. WILLS, at the dinner of his College on Tuesday night, and a correspondent in this issue, complain about the London pharmaceutical examiners summoning October candidates in September. This is a real grievance, if not an illegality.

THE report of the Irish Pharmaceutical Council's last meeting shows that Mr. Samuel Turkington, an associate druggist, has been selected to fill the vacancy on the Council caused by the death of Mr. Doran. Mr. Hayes has been re-elected President.

THE report of Dr. Bell, Principal of the Somerset House Laboratory, on which we comment, shows that the export of British tinctures and spirituous medicines, encouraged by the allowance of drawback, is largely developing. Dr. Bell also mentions a remarkable investigation into the bactericidal efficacy of disinfectants undertaken with a view to revise the Board of Trade's ships' stores requirements, the result of which is largely to the credit of carbolic acid.

THE CHEMISTS' AND DRUGGISTS' DIARY, 1893.

WE have nearly completed the preparation of this work, and will be going to press with it in a few days. So far as advertisements are concerned, we must absolutely

CLOSE FOR PRESS ON OCTOBER 22,

after which no orders can be received. We ask Firms who wish to have announcements in this DIARY to note that fact, and to communicate with the publisher at once. This is

AN OPPORTUNITY WHICH SHOULD NOT BE MISSED.

THE CHEMISTS' AND DRUGGISTS' DIARY is a universal favourite, a steady desk-companion all the year round, and is used daily in thousands of pharmacies and wholesale houses in all parts of the globe. It is to sustain the reputation of the DIARY in these respects that it is being prepared thus early. In order that

COLONIAL FIRMS

may have their copies about Christmas time, we must print and bind a large consignment for dispatch by the mail steamer sailing the first week of November. Then will follow dispatches to Indian, South African, and foreign subscribers, all of whom we aim to put on a footing with home subscribers in having their diaries ready for use before Christmas. It would be ridiculous placing the book before them in the middle of January. The literary contents of the 1893 edition will be of exceptional value, and we should like to see the advertisement section completely representative of the

BRITISH DRUG AND ALLIED TRADES.

Firms who have advertisement-contracts with us now in force should write to the publisher if they desire special matter inserted. Others who wish to figure in it will appreciate the necessity for securing space within the next few days.

DISTINCTION BETWEEN LINEN AND COTTON FIBRE.—If chromic acid is applied, linen fibre after a few seconds appears as if cut up into transverse portions, whilst cotton fibre, if similarly treated, is split up as if into bristles. [Wiesner in *Dingler*.]



CONDUCTED BY RICHARD J. MOSS, F.C.S., F.I.C.

QUALITATIVE ANALYSIS.

A METALLIC alloy will again form the subject of the exercise in qualitative analysis. The alloy must be submitted to a thorough systematic examination, its constituents detected, and all other substances proved absent.

Students' applications for portions of the alloy will be received up to Wednesday, October 19, and the samples will be forwarded immediately.

Students' reports will be received up to Saturday, October 29.

REPORTS.

The metallic alloy issued to our correspondents last month contained $33\frac{1}{2}$ per cent. each of zinc and antimony, and $16\frac{1}{2}$ per cent. each of lead and tin; it contained traces of iron, sulphur, and arsenic.

Sixty-three students received portions of the alloy, and forty-six sent in reports of their analyses. No less than twenty-five students failed to detect the tin, while the failures to detect lead, zinc, and antimony were 11, 10, and 8 respectively.

In the analysis of a metallic alloy the preparation of a solution is a matter of no small importance. For the purposes of precipitation hydrochloric acid alone has great advantages, while nitric acid or nitrohydrochloric acid are objectionable solvents when the use of sulphuretted hydrogen is contemplated. There are, however, cases in which the objection to the use of these solvents is overcome by some important advantage, and this exercise illustrated the fact very well. When the alloy was warmed with dilute nitric acid a violent action ensued, and nitrous fumes were evolved, showing that the acid was being robbed of its oxygen, and a whitish powder separated. It was clear that oxidation of the alloy or of some of its constituents had taken place. When it is considered what metals are oxidised in this way the number is found to be small, and for all practical purposes attention may be confined to antimony and tin. The first question that arose then was—Did the insoluble product of the action of nitric acid upon the alloy consist of an antimony oxide, a tin oxide, or of both? There was no difficulty in answering this question. One way of solving the problem was to wash the white residue with water, dry, and fuse it with sodium hydrate, exhaust the fused mass with water containing about one-fourth of its volume of alcohol. The solution now contained any tin present, while the insoluble residue, if any remained, contained the antimony in the form of sodium antimonate. To obtain the tin as sulphide the alkaline solution was acidulated with hydrochloric acid, and the tin precipitated with sulphuretted hydrogen. The antimony was also easily obtained as sulphide from an acid solution of the antimonate; or any other tests might have been applied for the purpose of identifying the separated metals.

The nitric-acid solution contained the lead and zinc, with very little antimony or tin. When the excess of acid had been removed by evaporation, hydrochloric acid added, and the solution cooled thoroughly, the greater part of the lead separated as chloride. The precipitation with sulphuretted hydrogen now presented no difficulties; most of the heavy

metals were removed, and consequently very little of the gas sufficed. This was a consideration which many of our correspondents will appreciate.

If, instead of operating in this way, a complete solution of the alloy were obtained, a serious difficulty arose. It was very hard to effect a perfect precipitation of the lead, antimony, and tin as sulphides; the disagreeable operation of passing sulphuretted hydrogen through the solution required to be continued for a long time. It was in the attempt to carry out this plan that most of our contributors got into difficulties. Those who took advantage of the production of insoluble oxides of tin and antimony had a much easier task to perform.

PRIZES.

The first prize for the best analysis of the alloy has been awarded to

A. H. CLELAND ("Danwer"), Leytonstone, N.E.

The second prize has been awarded to

GEORGE VOGT, 8 Serpentine Terrace, Kendal, Westmoreland.

Marks Awarded for Analyses:—

A. H. Cleland (1st prize) ..	97	Vigovina	76
Geo. Vogt (2nd prize) ..	96	G. H. H.	75
F. F. A. Tunbridge	93	Verax	72
A. Lander	92	D. N. Fullerton	70
H. F.	92	T. K. (Dublin)	68
A. Bunsen	90	A. Howard	67
Persist	90	Acidulous	65
H. McL. R.	90	Ozone	63
Zirconium	90	P. Harris	60
W. J. Brown	90	W. Burnett	55
Walton Porter	85	Sapientia	55
J. Rose	85	C. E. Ashby	55
H. Bowden	85	Moyhitt	50
Belladonna	84	Pepsine	50
W. Hood	83	Sunland	48
John	83	Aconitum	46
Pyrogallol	82	Schizocarp	46
Ornum	82	KCy.	45
J. A. Hare	80	Nulli Secundum	45
Ulexine	80	Victory	40
Cogito	79	Tyro	30
Cymro	78	Spero	25
Bee Gee	77	M. M.	20

TO CORRESPONDENTS.

Prizes.—The students to whom prizes are awarded are requested to write at once to the Publisher, naming the book they select, and stating how they wish it forwarded.

Any scientific book that is published at a price not greatly exceeding half a guinea may be taken as a first prize.

Any scientific book which is sold for about five shillings may be taken as second prize.

Note.—All communications should include the names and addresses of the writers.

G. VOGT.—Other determinations of the specific gravity were even lower than yours. It would have been difficult to get an accurate determination unless the alloy were reduced to fine powder, it was so full of cavities.

A. LANDER.—The precautions you took to ensure that the sulphuretted hydrogen was used in sufficient quantity were most important in this case.

PERSIST.—You should have given a summary of your results.

ZIRCONIUM.—The precipitation of lead as chloride showed more than a trace to be present, bearing in mind the comparative solubility of the chloride.

W. J. BROWN.—It was not easy to form an estimate of the quantity of tin present, but the spongy mass thrown down on the zinc was of considerable bulk if the precipitation in the platinum dish were conducted properly.

BELLADONNA.—Probably your solution contained too much free acid to admit of the precipitation of the tin as sulphide.

JOHN.—With ordinary care a considerable mass of finely-divided metallic tin was obtained by the electrolysis of the hydrochloric-acid solution of the oxides produced by treating the alloy with nitric acid.

J. A. HARE.—The nitrohydrochloric-acid solution of the alloy gave a considerable precipitate of lead chloride on cooling. A large excess of acid would, of course, prevent this.

ULEXINE.—The flaming you observed was due to the volatilisation and combustion of zinc, which burns in the air at a high temperature.

COGRO.—You must have had a large excess of acid present to prevent the separation of the lead chloride, or else you did not allow the liquid to cool sufficiently.

CYMBRO.—It is possible that, notwithstanding all your trouble, you failed to precipitate the heavy metals completely with sulphuretted hydrogen. The white precipitate which you took for aluminium hydrate may have been due to tin.

G. H. H.—A sublimate of mercury may always be positively identified, however small it is. No other sublimate consists of metallic globules which coalesce on being rubbed together. You should give more attention to methods of separation; odd tests are of very little value in such an analysis.

J. H. SHIMWELL.—The behaviour of the alloy with nitric acid suggested antimony just as much as tin. The colour of the sulphuretted-hydrogen precipitate was strongly suggestive of antimony.

T. K. (Dublin).—The metallic deposit of antimony was easily obtained by electrolysis. It is strange that you did not observe the blackening of the platinum, although you tried the experiment twice.

A. HOWARD.—With very little free acid present, part of the zinc might have been thrown down with the sulphides of the heavy metals but enough for subsequent detection would certainly remain in solution.

ACIDULOUS.—It does not appear from your notes that you allowed the hydrochloric acid solution to cool for the purpose of seeing if lead chloride would separate.

OZONE.—You did not sufficiently consider the possible presence of antimony; the several reactions you attributed to bismuth were due to either antimony or tin.

P. HARRIS.—A much more exhaustive analysis is necessary, remembering that all metals not detected in the alloy must be proved absent.

MOYHITT.—You mentioned lead as a constituent of the alloy, but according to your notes you did not detect it.

PEPSINE.—You do not seem to have noticed that it was an alloy you were dealing with.

ACONITUM.—An alloy of lead and zinc would not have yielded such a result with nitric acid; it would have dissolved to a clear solution free from white precipitate.

VICTORY.—It is impossible that you could have added sulphuretted hydrogen to a solution of the alloy without getting some precipitate, but to ensure a complete precipitation of the metals was a rather difficult matter.

HALF-YEARLY PRIZE.

The following are the names of the first twenty competitors in the special prize competition. Two of those included in our last list fall out—viz., "P. Macrocephalus" and "Moyhitt," giving place to F. F. A. Tunbridge and J. Rose.

Walton Porter	376	H. Bowden	343
J. A. Hare	373	Ulexine	341
A. Lander	373	H. McL. R.	337
Belladonna	372	Verax	337
Zirconium	370	A. Howard	330
John	357	Ornum	329
H. F.	354	F. F. A. Tunbridge	326
Bee Gee	352	J. Rose	317
Danwer	343	T. K. (Dublin)	313
W. Hood	347	Pepsine	309

English News.

Carbolic acid Poisoning.

On Monday night, Emily Holmes, aged nine years, residing at Allerton, near Bradford, died from carbolic-acid poisoning, after enduring frightful agonies. Deceased was in the house with her sister, and the latter handed her from the cupboard a bottle containing, as she believed, raspberry vinegar, a portion of which she drank from the bottle before the mistake was perceived.

Sheffield Chemists Meet.

The annual general meeting of the Sheffield Pharmaceutical and Chemical Society was held in the Society's rooms, Surrey Street, on Thursday evening, October 6. There was a good attendance of members and associates. The annual report and financial statement were read and passed. The following officers were appointed for the ensuing year:—President, Mr. Robert Watts; vice-presidents, Mr. William

Ward and Mr. S. T. Rhoden; hon. treasurer, Mr. G. T. W. Newsholme; members of the Council, Messrs. J. H. Bradwall, G. Ellinor, A. B. Fox, C. O. Morrison, G. T. W. Newsholme, G. Owen, jun., and J. Preston; auditors, Mr. R. W. Watson and Mr. A. Wood; hon. secretary, Mr. J. F. Eardley.

The School of Pharmacy was opened on Thursday evening, when an address to the students was delivered by Alderman W. Gowen Cross, J. P., of Shrewsbury.

A Chemical Firm's Gift to Oldbury.

Members of the firm of Messrs. Albright and Wilson, chemical manufacturers, of Oldbury, have presented three recreation-grounds to their town. Mr. Arthur Albright gave a park for Langley and 1,000% for its maintenance. His son, Mr. W. A. Albright, gave a recreation-ground for the centre of the town, and Messrs. Wilson contributed 1,000% to provide a recreation-ground for Rounds Green.

A Goose Stuffed with Poison.

The residents at Clarke's Temperance Hotel, Birmingham, had a narrow escape a few days since. The late Mr. Clarke suffered from asthma, and used to smoke a mixture of stramonium and belladonna, which was kept in a jar in the pantry. A goose was prepared for dinner, and by mistake the cook went to the jar referred to, and took out a large handful of the mixture and stuffed the goose with it, believing it to be sage. About an hour after dinner Mrs. Clarke, her two daughters, and the servants experienced burning and dryness in the throat, and the pupils of their eyes were dilated. After consultation with a neighbouring chemist (Mr. W. Jones, of Banks & Co.) the origin of the mischief was traced, and a surgeon was called in, who administered emetics. A commercial traveller staying in the house was also affected.

Fire.

On Thursday afternoon of last week a fire broke out in the shop of Messrs. Caave & Jackson, chemists and druggists, Broad Street, Hereford, owing to the vapour of some turpentine catching fire during the making of furniture-polish by an assistant. A police constable who was standing outside observed the smoke and hurried in, and with the help of the assistant succeeded in extinguishing the flames in a few minutes. Their labours were greatly helped by the bursting of a large carboy containing water in the vicinity of the outbreak. The damage to the shop and contents is considerable, and two sheets of plate glass in the front window are cracked. Messrs. Caave & Jackson are insured.

Westminster College Dinner.

On Tuesday night the opening of the twenty-first session of the Westminster College of Pharmacy was celebrated by a dinner in the Venetian Chamber of the Holborn Restaurant, whereat Captain Cecil Norton, M.P., presided, supported by Mr. G. S. V. Wills and Mr. H. Wootton. Covers were laid for 160 guests, and dinner was served about 7 o'clock. The chairmen of the spur tables were Messrs. Dobson, Gravill, Botwood, Walden, Watson Will, and Morrison. After the Queen had been toasted, the Secretary (Mr. Walden) read his report of the twentieth session, which reflected a change in the work of the College in sympathy with the altered examinations, a much larger proportion of time having been devoted to practical chemistry and pharmacy. Of the students 123 passed various medical and pharmaceutical examinations, the latter comprising 17 in the Preliminary, 63 in the Minor, and 13 in the Major. The numbers were not so large as in previous years, but that was attributed to the alteration in the examinations. The report concluded by congratulating Mr. Wills on the fact that this year he completes his twenty-first year as a pharmaceutical teacher.

Mr. Pensam gave "Success to the Westminster College of Pharmacy," and in replying to it Mr. Wills said that he was always glad to see the old faces which were brought together on those occasions. The College was still going ahead. At the July examinations they had twenty men more on hand than the College was supposed to accommodate, and he had the satisfaction of knowing that when his students went out into world they did well. Four Westminster College men were examiners on different pharmacy boards in the colonies, and two were presidents of colonial societies. He congratulated old

students on the fact that they had got "through the mill," for the Minor was a very different thing now to what it was when he first commenced to teach. To pass a creditable examination now was no mean ordeal. He believed that the examinations were conducted fairly and in an impartial manner. He had no fault to find with increased severity, nor with the new subjects, which would be useful, but he would like to know where these changes were going to end. (Hear, hear.) What with increased severity in chemistry and the knowledge of practical pharmacy required they were making all the candidates wholesale chemists, and there would be a strike amongst the latter by-and-by if they did not take care. (Laughter.) But one thing he did complain of, and that was the absence of any fixed date for the examinations. They used to know when the examinations would come on, and teachers made their arrangements accordingly. Thus in July the examinations used to begin on the 9th and they closed the College on the 10th; this year the examinations did not begin until the 20th. October examinations used to begin about the 24th; this year they began on September 27, while many students had still a large section of the lectures to attend. As the new regulation required fees to be paid on the 15th day of the month previous to that in which the examinations are held, the fee ought to have been paid in August. (Laughter.) He would not complain about the matter if the London Board was not so shifty, and there was agreement between them and the Edinburgh Board as to dates; but there was none. One of his students had received notice to attend in Edinburgh on October 25—a whole month more for preparation. It was the shortened time that accounted for the exceptional number of failures amongst the College men in the theoretical work last time; they had all done remarkably well in the practical part. Mr. Wills also mentioned that he had noticed a greater desire on the part of students to go to Edinburgh. They said it was easier there. He said that could not be; but they asked him to explain these figures of the July Minor examinations:—London, 191 examined and 67, or 35 per cent., passed; Edinburgh, 88 examined, and 51, or 58 per cent., passed. He could not explain that; it was for the Pharmaceutical Society to do it. (Hear, hear.)

Other toasts followed, and before the company—which, by the way, was an appreciative and enthusiastic one—separated Captain Norton distributed the prizes to last session's successful students. The following were the principal prize-takers:

Chemistry and Physics.—Silver medals: J. E. Frost, T. Brown, R. H. Richards. Bronze medals: F. L. Morris, W. A. Sharp, J. E. Thompson; 18 certificates were awarded.

Botany.—Bronze medals: J. E. Frost, T. Brown, H. W. Colley; 27 certificates were awarded.

Materia Medica.—Bronze medals: W. H. Peck, G. A. Johnson, C. Barnett; 25 certificates were awarded.

Pharmacy.—Bronze medals: W. H. Peck, T. Brown, C. Barnett; 15 certificates were awarded.

Practical Dispensing.—Bronze medals: C. E. Moorman, J. E. Collins.

In presenting the prizes Captain Norton made rather a smart speech, in which he claimed that the British chemist and druggist was as clever a man as his continental equivalent. Quite lately he had been in Bulgaria, and he did not think much of the condition of pharmacy there. He had been at the Hague and took a prescription to a chemist, who told him that it would take four hours to make. "Four hours!" said the Captain, "why I leave in an hour!" The fact was that no one in the shop could read the prescription. Captain Norton made an excellent chairman, and was quite popular with the guests before they parted.

Sad Death of a Chemist's Daughter.

Amy Hymarsh Johnson, aged 17, daughter of Mr. Mark Johnson, chemist, 6 Sylvester Road, Hackney, died last week from injuries received through burning. Her clothes took fire while cooking the breakfast, and though her mother and brother extinguished the flames as soon as possible, the injuries and the shock were so severe that she succumbed in a few hours.

Brighton Junior Association of Pharmacy.

The first meeting of the session of this Association was held on October 6, Mr. A. E. Coleman, president, in the

chair. Messrs. Jeeves, Price, Snow, and Wilson, were elected to the Council.

The President gave an address, in the course of which he alluded to the history of the Society. He directed attention to a lecture to be given by Mr. Lomax, Curator of the Brighton Museum, on "The Colouring-matter to be found in Plants," and said the Senior Association of Brighton had again offered two prizes for competition, particulars of which would be announced in due course. Last spring, when the same offer was made, there were twelve entries, but only two put in an appearance. That was a disgrace to them, and their thanks were therefore due to the Senior Association for giving them another chance to retrieve their character. After advocating a strong effort in favour of early closing, he said it was of no use looking to the Pharmaceutical Society for any help in this direction. They must work for it themselves, and he should like to see some effort made during his term of office. In speaking of the Pharmaceutical Society, he did not wish to enter into any controversy, but he was of opinion, if they wished to get a more general support, they should show themselves more worthy of it. Taking only one instance that had occurred this year—he meant the chlorodyne case—he thought they had acted even worse than the hare in the race with the tortoise, for they not only went to sleep, and allowed the Treasury to pass them, but it seemed as if they were asleep yet. In his opinion, they had allowed to slip one of the most excellent opportunities they had had for many a long year, notwithstanding what a local member of the Society had said to the contrary. If they had only followed up the new reading of the Act that was given in the early part of the year, it would have had the general support of the large majority of chemists in the country.

Manchester Assistants in Competition.

A few days ago there was held in Manchester the competition for the herbaria, presented by Mr. W. Stones, treasurer of the Manchester Pharmaceutical Association. The rooms of the Association proved quite large enough to hold the apprentices and assistants who came forward, for, sad to say, only about half-a-dozen of them put in an appearance. The adjudicators reserved their decision.

Alleged Embezzlement by a Traveller.

Before Mr. Bros, at North London Police Court, on Wednesday, Charles J. Huddy, a traveller, of Prince of Wales Crescent, Kentish Town, was charged with embezzling various sums of money paid him on account of his employer, Mr. Robert Orrock, glass-bottle manufacturer, of Wallis Road, Hackney Wick. Mr. D. A. Romain, who prosecuted, said that the prisoner had been employed by Mr. Orrock for three or four years as a traveller, and it had been discovered that he had not paid in all he had collected. The prisoner said he considered Mr. Orrock was indebted to him because he had taken a lot of his (prisoner's) customers. Mr. Major, bottle manufacturer, of Thomas Street, Kennington Park, and Mr. Galloway, chemist, of 74 Deacon Street, Walworth Road, were called to prove having paid the prisoner sums which he had not accounted for to his employer, and Mr. Bros committed the prisoner for trial, but accepted bail.

Laudanum-drinking.

Mr. Danford Thomas held an inquest on Wednesday in regard to the death of Lionel Jacobs, senior partner in the firm of Jacobs & Co., manufacturing stationers and printers, 12 and 14 Duke Street, Aldgate. According to the widow's evidence, her husband had been much afflicted with insomnia, for which he had recourse to laudanum and other narcotic poisons. On Sunday last he had a bilious attack, and remained in bed all day. On Monday morning he was found dead in bed. When Dr. Morton was called to the house he found in the bedroom a small bottle, which had contained chlorodyne, an ounce bottle that had held chloroform, and in a drawer a larger bottle which had contained laudanum. Dr. Morton found no organic disease to account for death, which was due, he considered, to an overdose of laudanum or some other narcotic poison. Mr. J. E. Vause, chemist, said Mr. Jacobs frequently purchased chloroform from him. The last occasion was a fortnight ago. There was no restriction upon the sale of chloroform or of chloro-

dyne, but the bottles containing laudanum must be labelled "Poison." He sold a gallon of laudanum a month, and six of his customers took 2 oz. of the poison daily. The jury returned a verdict of death from misadventure.

The Institute of Chemistry.

An extraordinary general meeting of the Institute was held in the large room of the Statistical Society, 9 Adelphi Terrace, Strand, on Friday, October 7. A fairly representative number of members attended, among whom were Dr. Frankland, Dr. Bell, Professors Ramsay, Dunstan, and Foster, Mr. Otto Hehner, and Dr. Bernard Dyer.

The President (Prof. Tilden) fully explained the circumstances which had induced the Council to recommend the securing of premises in which the business and examinations of the Institute could be efficiently conducted. Hitherto the examinations have been conducted in a manner scarcely calculated to ensure confidence either on the part of candidates, or of the profession, or of the public, in view of the lack of proper appliances in some of the laboratories at the disposal of the Council.

The President's uncompromising remarks as to the character of the examinations evidently produced a profound impression upon the meeting, with the result that the following recommendation of the committee was carried with the addition of the words "or buildings" after "such premises":—

In view of the necessity for providing, in addition to office accommodation, premises upon which the examination of the Institute can be efficiently conducted, the Finance and Office Committees jointly recommend that the Office Committee be empowered to take steps to secure such premises; and, if necessary, to expend upon the purchase of a lease a sum not exceeding one-fourth of the invested capital of the Institute, and that the President be authorised to sign the necessary documents.

Mr. Carteighe urged strongly the adoption of the recommendation and was prepared to spend a great deal more than the very reasonable one-fourth of the Society's invested funds.

Mr. Friswell proposed the resolution, and

Mr. T. Tyrer seconded it, but before doing so asked whether the addition of the words "or buildings," of which notice had not been given, would in any way jeopardise the legality of the decision of the meeting. He strongly urged that there should be no lapses which should encourage cavil and furnish openings for the criticisms which usually attended the public meetings of the Institute.

The President assured him that the recommendation of the Finance Committee had been so framed in wide terms that it might be narrowed and made definite at that meeting.

Mr. Tyrer thereupon formally seconded Mr. Friswell's motion, and expressed his belief that the Council had done a wise thing, and that if both parties in the Institute availed themselves of this opportunity great good would be done, and the influence of the Institute extended.

Some questions were then asked about the reasons for the recommendation of the Council, Mr. Hehner and Professor Foster particularly emphasising the desirability for proper facilities for adequate examinations—the former expressing himself emphatically in favour of the recommendation of the Council. Without definitely saying where the locality was, the President intimated that the house was in the neighbourhood of Bloomsbury, that it was a better house than the whole house in which they were then located, and that it had rooms which would lend themselves readily to the proper conduct of examinations.

A Glossop Chemist Fined.

At Glossop, on October 10, Thomas Bradbury, chemist, High Street West, was fined 10s. and costs for being drunk and disorderly.

St. Helens Chemical and Copper Workers.

About 50 members of the Chemical and Copper Workers' Union, of which Mr. P. J. King, of St. Helens, is president, have seceded and formed another Union under the title of "The Amalgamated Society of Chemical and Copper Workers." Mr. Andrew Hodgkins has been elected chairman, and Mr. P. Collins secretary. It is stated that the chief objection to the old Society is the one-man system under which its affairs have been managed.

Grocers and Stamped Medicines.

At the annual meeting of the Federation of Grocers' Associations of the United Kingdom, held in Manchester this week, reference was made, as was expected, to the sale of proprietary medicines by grocers. The General Purposes Committee, in their annual report, dealt with the subject in the following manner:—"This matter has been carefully considered by your executive, and much discussion and correspondence have ensued. In the opinion of your committee the interpretation of the Pharmacy Act which it is sought to impose upon vendors is most unfair and improper, and it strongly recommends affiliated Associations to defend any of their members against whom it is sought to recover penalties, assuring any Association taking such action of financial and all other proper support." Mr. Alderman Barrow, of Birmingham, who presided over the meeting, spoke in commendation of this passage in the report; and later in the proceedings, on the motion of Mr. Maurice Piper (London), the meeting passed the following resolution:—

That in the opinion of this Federation of Grocers' Associations it is expedient to take the earliest opportunity of thoroughly testing the question of the sale by grocers of stamped medicines containing poisons, this Federation being of opinion that stamped proprietary medicines are within the exceptions of the Pharmacy Act, 1868.

The Chemist and the Botanist.

William Butterfield, chemist and druggist, of Bolton Road Blackburn, has been summoned at the Police Court of that place for using insulting language to Edward Howarth. Complainant, who is a botanist, stated that in December last he ordered some syrup from defendant, who sent more than he required. He sent the surplus back. On Monday he and his father went to Mr. Butterfield's and asked for the syrup that had been returned. To this Mr. Butterfield objected, saying he would not let complainant have it until he paid 6s. for the storage. Howarth objected, and high words followed on both sides. There was also a cross-summons. It seems that in August Mr. Butterfield obtained judgment against Howarth in the County Court, and it was argued that he went to the shop for the purpose of insulting Mr. Butterfield. Ultimately one summons was withdrawn and the other was dismissed.

Dispute over a Chemist's Contract.

At the meeting of the Farnham Board of Guardians a letter was read from Mr. Dunston, chemist and druggist, asking why the tender of Mr. Griffith was accepted for the supply of cod-liver oil, crushed linseed, and quinine when it was more than his. He wanted to know how Mr. Griffith obtained the list of extra drugs. He (Mr. Dunston) applied for it at the workhouse, and was told that the doctor had not made it out. It appeared that the reason the committee recommended Mr. Griffith's tender was that that was the only complete one before them. It further transpired that there being no extra list of drugs, the master suggested to Mr. Griffith's assistant, who called on him, that Mr. Griffith should compile a list of drugs he thought the doctor would require. It was decided that in future the doctor should submit to the Board a list of the extra drugs he required before the tenders were advertised for, and that a letter should be written to Mr. Dunston regretting that there had been an error, and assuring him that it would not occur again.

Irish News.

The Castlerock Poisoning case—The Druggist Committed for Trial.

At Coleraine Petty Sessions, on October 7, James Mullan, druggist, Castlerock, was charged with having negligently sold a quantity of tartar emetic in mistake for tartaric acid, unlawfully causing the death of the male infant child of David and Sarah Jane Gardner, of Liffock, near Coleraine, on August 26, 1892. The circumstances of the case have been already reported. The defendant supplied for the Rev. Dr. Irwin some tartar emetic when tartaric acid was sent for.

The powder was used to make a drink with, and all the members of Dr. Irwin's household partook of it, and were made ill by it. Mrs. Gardner, who was working at the house, and who also drank some of the solution, was confined of a child a few days later, and this child died some days after. Medical and chemical evidence attributed the death to the poison the mother had taken. After consultation, the Magistrates (there were ten on the bench) resolved, by the casting-vote of the Chairman, to send the case for trial. Mr. Mullan was admitted to bail, himself in 50%, and two sureties in 25% each.

A Prize-essay Writer.

John Strahan, M.D., Belfast, has been awarded the Triennial Warren Prize, value \$500, given by the General Hospital, Massachusetts, U.S., for a treatise on "Rickets." The prize was open to general competition, and the subject left to the candidate; the prize to be withheld if no essay of sufficient excellence was submitted. The essay will be published shortly. In 1883 Dr. Strahan gained the Fothergill Gold Medal of the London Medical Society for an essay on "Typhoid Fever," and in 1889 the Jeux Memorial Prize of \$250 given by the College of Physicians, Philadelphia, for an essay on the "Diagnosis and Treatment of Extra-uterine Pregnancy," for which he was also elected corresponding member of the College.

The Council's Record.

During the past official year the Pharmaceutical Council held thirteen full Council meetings and sixty-four committee meetings.

[October Examinations.]

Pharmaceutical Licence.—Messrs. J. W. Harvey, R. S. Chapman, P. P. Lee, G. G. Fetherston, R. D. Harman, M. R. Nugent, S. I. Cleland—J. Hill, T. M. Jozè, passed. Three candidates were rejected.

Pharmaceutical Preliminary.—Messrs. D. Nelligan, H. Johnston, S. H. Fisher, J. Hanratty, J. J. Fuzimous, J. Magill, M. Johnston, R. J. Chapman—F. Keppel, R. Collis, passed. Three candidates were rejected.

Registered Druggist Licence.—Messrs. E. Brady, A. H. Cunningham, H. F. Galbraith, J. W. Henderson, W. E. Hunter, passed.

Probate.

The personal estate of the late Mr. Harry Napier Draper, pharmaceutical chemist, of Dublin, has been proved at over 22,000%.

Scotch News.

Tartaric Acid Alleged to be Adulterated.

In the Glasgow Sheriff Court on Monday, October 10, before Sheriff Birnie, Andrew Whitelaw, grocer, 52 Grove Street, was charged, at the instance of the sanitary inspector for the city, with having sold to one of his officers on August 31 $\frac{1}{4}$ lb. of tartaric acid which the public analyst certified was adulterated with .13 per cent. of sulphate of lime extraneous to tartaric acid, and .041 per cent. of lead, equivalent to 2.87 grains of lead per lb. of the sample, also extraneous to tartaric acid.

Mr. Whitelaw, who pleaded not guilty, stated that he was having an analysis made of a sample of the tartaric acid, and, on his application, the case was adjourned till October 26.

John Black, grocer, 66 Maitland Street, was charged that on August 31 he "sold to Inspector Armstrong $\frac{1}{4}$ lb. of tartaric acid which, on analysis, was found to contain .17 per cent. of sulphate of lime and .013 per cent. of lead, the proportion of lead being equivalent to .91 grain per lb. of the sample."

Mr. Black produced a warranty, which he said he had received from the wholesale merchant along with the tartaric acid, and said he should base his defence upon that document.

Mr. John Lindsay, the prosecuting agent, said he would examine the document, and intimate to the defender what course he meant to adopt regarding the prosecution.

This case was also adjourned till October 26.

A similar case against Messrs. H. & W. Wilson, grocers, 30 Titwood Place, Strathbungo, was also adjourned to the same date because of the non-appearance of the defenders. It is alleged that they sold 1 oz. of tartaric adulterated with .0278 per cent. of sulphate of lead, equivalent to 1.33 grain of lead per lb. of the sample.

Alkali Manufacture.

The Edinburgh Museum of Science and Art, one of the most instructive museums to students of pharmacy, has recently acquired an interesting series of specimens illustrating the production of alkali by the Leblanc process. The United Alkali Company (Limited) are the donors, and each specimen is the representation of the amount of the product obtained by manipulating 1 lb. of common salt. There are also wood-blocks to represent the furnaces and apparatus employed, whereby the whole system of processes connected with the Leblanc method of making soda is admirably shown. On the labels of the specimens the weights are given in pounds and decimals of a pound. Thus, to produce 1.10 lb. of sulphate of soda it requires 1 lb. of common salt and 1.04 lb. of sulphuric acid of 1.71 specific gravity. From this 1.10 lb. of sulphate of soda, together with 1.10 of limestone and .55 of mixing coal, 1.76 lb. of black ash is obtained. By subsequent treatment this quantity of black ash yields either .76 lb. of soda ash, or 1.92 lb. of soda crystals, or .50 of caustic soda. In the same way the figures are given for the bleaching powder and sulphuric-acid processes and for the recovery of sulphur. Fillets in different colours connect the specimens and blocks representing each process, the whole arrangement being founded on an instructive diagram showing the processes in the soda manufacture designed by Mr. J. J. Miller, of Gateshead-on-Tyne, and recently published by Mr. J. Heywood, Manchester.

In Latin.

Last Friday, Dr. William Macewen, the new professor of surgery in the Glasgow University, in accordance with ancient usage, read a Latin essay on a theme prescribed as a "trial of his abilities." The subject of his essay was: "Quibus indicibus externis locus suppuracionis in cerebri regione temporosphenoidali recte reperiatur." It was approved.

Society of Chemical Industry.

The meetings of the Glasgow and Scottish section of this Society have been fixed for November 1, December 6, January 3, February 7, March 7, April 4, May 2, and June 6. The December and March meetings are to be held in Edinburgh, and all the others in Glasgow.

A Misconception.

The paragraph in last week's Scotch News in regard to the sale of Robertson & Co.'s business, at 5 Alvanley Terrace, appears to have given rise in Edinburgh to the impression that Mr. Thomas Thompson, of J. Robertson & Co., has sold his retail business at 35A George Street. There is only the similarity in the firms' names which can account for that, otherwise there is no connection, and Mr. Thompson has no intention of selling his George Street business.

Presentation to a Glasgow Chemist.

On October 7 a set of handsomely-bound volumes and a valuable diamond scarf pin were presented by the assistants of Mr. John McMillan, the well known Glasgow chemist, to one of the members of the staff, Mr. James Abbott, who was for a good many years in Mr. McMillan's Hillhead establishment, and who is this week starting for himself in a well-stocked shop in Henderson Street. The presentation was made by Mr. John Neil. After Mr. Abbott had replied, a pleasant evening was passed by the company.

Carbolic Poisoning.

A child of eight months, daughter of Mr. Glashan, Mill of Cromlet, Old Meldrum, was accidentally poisoned on Tuesday, October 11, by a sister of four years giving it a quantity of carbolic oil.

An Edinburgh Trade Association.

There is every likelihood of a trade association being formed shortly among Edinburgh chemists. Its objects, as contemplated, will be the consideration of questions affecting the trade generally, such as spirit-duties, patent-medicine licences, the affixing of stamps on patent medicines, and any other matter on which there would likely to be unanimity, and on which joint action would be taken if necessary. It is proposed to call a meeting at an early date, probably about the beginning of November.

French Pharmaceutical News.

(From our Paris Correspondent.)

CHLOROFORM ACCIDENTS.—M. Peyron, Director of Public Relief, has issued instructions to the managers of Hospitals to prepare statistics of all accidents caused by inhaling chloroform. They are required to give the date of the accident, the service in which it has taken place, the name of the doctor, the age, name and profession of the patient, and the nature of the malady or operation for which the chloroform was used. This order is to date from April 1, 1890.

BROMIDE OF STRONTIUM.—Professor Germain Séé has made a special study of bromide of strontium, and has used it successfully for affections of the stomach. Another medical man has now discovered that it is extremely useful as a cure for nausea. One or more doses at meal times are advised. Bromide of strontium may also be used to advantage in the general treatment of vomiting. The unpleasant taste of the remedy in solution can be overcome by supplying the salts in hermetically closed bottles containing a gramme each; the patients should take the contents in a wafer just before a meal.

ENGLISH PHARMACISTS AND DOCTORS IN PARIS.—The annual meeting of the Continental Anglo-American Medical Society was held at the Grand Hotel, Paris, on Thursday, October 6. After the usual afternoon meeting the company sat down to a banquet at 8 P.M. Among the visitors were the two *doyens* of English pharmacy on the Continent, Messrs. T. P. Hogg and Swann. Dr. Douglas Hogg, of the Champs Elysées Pharmacy, was also present. Amongst the guests from England was the ubiquitous Mr. S. M. Burroughs, of Messrs. Burroughs, Wellcome & Co. This gentleman had brought with him a really fine selection of the pharmaceutical specialties made by his firm. By the courtesy of the Society's committee these articles were exhibited for the inspection of the medical men present. No other pharmaceutical goods were shown.

THE NEW CUSTOMS TARIFF is now in fairly good working order, and not only the foreign manufacturers, but also French consumers, are beginning to discover its many disadvantages. A general feeling is growing that the tariff is devised too much in the interests of a privileged few. Alien pharmaceutical preparations have suffered very severely under the new state of things, and it would seem that an attempt is being made to endeavour to keep them out of the country altogether. As is generally known, the admission or refusal of medicaments made abroad is decided by a committee of the Paris School of Pharmacy. It is possible, also, that these gentlemen may in turn be influenced by the interested representations of some of their manufacturing colleagues. Such a course is greatly to be deprecated. In the first place, the reputation of French pharmacists is such that they can surely meet the competition of the world in their own country with perfect equanimity, and, in the second, the authorities apparently lose sight of the very important fact that thousands of invalids flock to Paris and the Riviera annually. If these visitors cannot easily obtain the medicines prescribed by their medical men, who may reasonably be supposed to know what their patients require, there may be a tendency on the part of foreigners to seek repose in countries less hampered by prejudice. The loud wailing on the part of hotel proprietors and shopkeepers that would follow such a state of things might then arouse the Govern-

ment somewhat tardily to establish a more reasonable system. An instance of the curious way the Customs tariff is being administered was mentioned to the representative of THE CHEMIST AND DRUGGIST by a well known London manufacturer a few days ago. This gentleman had sent a varied parcel of pharmaceutical specialties to Paris, and discovered to his amazement that duty had been charged, not on the invoiced or wholesale value, but on the supposed retail price of the articles.

AMERICAN WHOLESALE DRUGGISTS' CONVENTION.

THE National Wholesale Druggists' Association of America held their eighteenth annual "Convention" at Montreal in the third week of September. Mr. Robinson was in the chair. This, we believe, is the first time that the Association has foregathered beyond the boundaries of the United States, but in spite of the somewhat out-of-the-way situation of the meeting-place, the attendance was large and enthusiastic. The druggists were welcomed to Montreal by the mayor of the city, and their first business meeting was opened with prayer by the Rev. Dr. Rose. The Association numbers 434 members—an increase of nine since the meeting at Louisville last year.

The question of the regulation of prices of proprietary articles occupied, as usual, a very large share of the attention of the members, and at the third session a deputation delegated by the retail druggists' associations was admitted to address the meeting on the subject. This deputation reminded the meeting that a scheme for the prevention of cutting had been elaborated by the American Pharmaceutical Association at the request of the wholesalers, and had already been considered by them. They now pressed for a declaration of the views of the Convention on the subject. A long discussion ensued, remarkable for little else than the revelation of hopelessly discordant views on the subject, and at its close the matter was referred to a committee, who appear to have been more reconcilable in their opinions, for they afterwards presented a series of resolutions which were the practical outcome of an agreement between themselves and the National Association of Manufacturers of Proprietary Medicines, which was holding its conference in Montreal at the same time. The resolutions (subsequently adopted by the Convention) are to the following effect:—The manufacturers of patent medicines will adopt such marks on their goods and keep such records as will enable them to discover from each retail package the name of the wholesale dealer to whom they sold the goods. They will also include in their contracts with their wholesale agents a clause to the effect that they (the agents) must not sell their goods to any retail dealer whose name may be in the Prohibited List, except at full retail prices. This Prohibited List is to consist of the names of all retail dealers who sell goods at cut prices, provided that evidence of such sale is furnished to the Patent-medicine Association by the secretary of the Druggists' Association, endorsed by at least three retail dealers engaged in business in the city or town where such complaint is made, and who are members of the organisation, and by at least one wholesale dealer who is a member of the National Wholesale Druggists' Association. This provision is not to be operative unless at least 50 per cent. of the retailers in the city or town in question are members of the league.

The next session was enlivened with a speech by Mr. Albert Plant on the Paddock Pure Food and Drugs Bill, a Draconian measure which has been before Congress for some time and proposes to place the drug-trade under the most stringent Government control with regard to the purity of the goods handled by it. Mr. Plant maintained that the laws enacted by other countries for the prevention of the trade in impure drugs and foods had been gross failures. He referred particularly to this country, and made the following astonishing statements:—"There have been no convictions under the law now in force in England. The most recent case was the indictment of a grocer in Glasgow for canning green peas with copper, there being ten times as much copper as was usually found. He brought four experts—two former State

chemists and two professors from the State University—to prove that the addition of copper to green peas was not harmful. The consequence was the jury disagreed.”

After being thus enlightened, a resolution to oppose the Paddock Bill was carried. Detroit was chosen as the next meeting-place, and Mr. J. E. Davis, of the firm of Williams, Davis, Brooks & Co., of Detroit, was elected President for the ensuing year, with Mr. Merriam, formerly of A. B. Merriam & Co., in Cincinnati, as Secretary.

Pharmaceutical Society of Great Britain.

FIRST OR PRELIMINARY EXAMINATION.

THE following are the questions which were given on Tuesday, October 11.

LATIN.

(Time allowed: From 11 A.M. to 12.30 P.M.)

I. For all candidates. Translate into Latin:—

1. The good son has a good mother.
2. Those things which are right are praised.
3. We know that virtue and vice are contrary to each other.
4. The table is two feet long, a foot and a half wide.
5. There are some who think that M. Crassus is not ignorant of the design of Catiline.

II. Translate into English either A (Caesar) or B (Virgil).

(Candidates must not attempt both Authors.)

A. CAESAR.

1. Labienus, ut erat ei praeceptum a Caesare, ne proelium committeret, alsi ipsius copiae prope hostium castra visae essent, ut undique nunc tempore in hostes impetus fieret, monte occupato nostros expectabat proelioque abstinbat. Multo denique die per exploratores Caesar cognovit et montem a suis teneri, et Helvetios castra movisse, et Considium, timore perterritum, quod non vidisset, pro viso sibi renuntiasse. Eo die, quo consuerat intervallo, hostes sequitur, et milia passuum tria ab eorum castris castra ponit.

2. Factum ejus hostis periculum patrum nostrorum memoria, quum Cimbris et Teutonibus a Caio Mario pulsus, non minorem laudem exercitus, quam ipse imperator, meritis videbatur; factum etiam nuper in Italia servili tumultu, quos tamen aliquid usus ac disciplina, quam a nobis acceperant, sublevarent. Ex quo judicari posset, quantum haberet in se boni constantia; propterea quod, quos aliquamdiu inermes sine causa tenuissent, hos postea armatos ac victores superasset.

Grammatical Questions.—For those only who take Caesar.

1. Decline in full (singular and plural), *ejus hostis*; and in the singular only, *servili tumultu*. (Paragraph 2)
2. Give the principal parts of the following verbs:—*committeret, fieret, abstinbat, cognovit, movisse, vidisset, connumerat, sequitur, ponit*. (Paragraph 1.)
3. Parse fully the following words:—*ne, prope, occupato, movisse, perterritum, quod, quo, sequitur, passuum*. (Paragraph 1.)
4. When is the conjunction *ut* followed by the subjunctive mood, and when by the indicative? Give sentences in illustration.

B. VIRGIL.

1. Dixit, et avertens rosea cervice refulsit,
Ambrosiaeque comae divinum vertice odorem
Spiravere; pedes vestis defluxit ad imos;
Et vera incessu patuit dea. Ille, ubi matrem
Agnovit, tali fugientem est voce secutus:
Quid natum toties, crudelis tu quoque, falsis
Ludis imaginibus? cur dextrae iungere dextram
Non datur, ac veras audire et reddere voces?
Talibus incusatus, gressumque ad moenia tendit.
2. Di tibi, si qua pios respectant numina, si quid
Usquam iustitia est et mens sibi conscia recti,
Praemia digna ferant. Quae te jam laeta tulerunt
Saecula? qui tanti talem genere parentes?
In freta dum fluvii currunt, dum montibus umbrae
Lustrant convexae, polus dum sidera pascet,
Semper honos, nomenque tantum laudisque manebunt,
Quae me cunque vocant terrae.

Grammatical Questions.—For those only who take Virgil.

1. Decline in full (singular and plural) *cervice, pedes, moenia*. (Paragraph 1.)
2. Give the principal parts of the following verbs:—*respectant, tulerunt, currunt, pascet, manebunt*. (Paragraph 2.)
3. Parse fully the following words:—*avertens, spiravere, tali, secutus, toties, quoque*. (Paragraph 1.)
4. When is the conjunction *ut* followed by the subjunctive mood, and when by the indicative? Give sentences in illustration.

ARITHMETIC.

(Time allowed: From 12.30 P.M. to 2 P.M.)

[The working of these questions, as well as the answers, must be written out in full.]

1. Write in Roman characters the product of Ten thousand three hundred, and One hundred and seven.
2. I spent a third of my money, then one-fifth of the remainder, then half as much as I had already spent. This left me with a guinea and a half. How much had I at first?
3. Multiply 253.75 by 4027, and divide the product by 23189.
4. Divide 107½ kilog. of beef among 6 men and 16 women, giving each man half as much again as each woman.
5. Express 428571 of 2 tons—¼ of 1/2 of 1/3 of 1/4 of 1/5 of 1/6 of 1/7 of 1/8 of 1/9 of 1/10 of 1/11 of 1/12 of 1/13 of 1/14 of 1/15 of 1/16 of 1/17 of 1/18 of 1/19 of 1/20 of 1/21 of 1/22 of 1/23 of 1/24 of 1/25 of 1/26 of 1/27 of 1/28 of 1/29 of 1/30 of 1/31 of 1/32 of 1/33 of 1/34 of 1/35 of 1/36 of 1/37 of 1/38 of 1/39 of 1/40 of 1/41 of 1/42 of 1/43 of 1/44 of 1/45 of 1/46 of 1/47 of 1/48 of 1/49 of 1/50 of 1/51 of 1/52 of 1/53 of 1/54 of 1/55 of 1/56 of 1/57 of 1/58 of 1/59 of 1/60 of 1/61 of 1/62 of 1/63 of 1/64 of 1/65 of 1/66 of 1/67 of 1/68 of 1/69 of 1/70 of 1/71 of 1/72 of 1/73 of 1/74 of 1/75 of 1/76 of 1/77 of 1/78 of 1/79 of 1/80 of 1/81 of 1/82 of 1/83 of 1/84 of 1/85 of 1/86 of 1/87 of 1/88 of 1/89 of 1/90 of 1/91 of 1/92 of 1/93 of 1/94 of 1/95 of 1/96 of 1/97 of 1/98 of 1/99 of 1/100 of 1/101 of 1/102 of 1/103 of 1/104 of 1/105 of 1/106 of 1/107 of 1/108 of 1/109 of 1/110 of 1/111 of 1/112 of 1/113 of 1/114 of 1/115 of 1/116 of 1/117 of 1/118 of 1/119 of 1/120 of 1/121 of 1/122 of 1/123 of 1/124 of 1/125 of 1/126 of 1/127 of 1/128 of 1/129 of 1/130 of 1/131 of 1/132 of 1/133 of 1/134 of 1/135 of 1/136 of 1/137 of 1/138 of 1/139 of 1/140 of 1/141 of 1/142 of 1/143 of 1/144 of 1/145 of 1/146 of 1/147 of 1/148 of 1/149 of 1/150 of 1/151 of 1/152 of 1/153 of 1/154 of 1/155 of 1/156 of 1/157 of 1/158 of 1/159 of 1/160 of 1/161 of 1/162 of 1/163 of 1/164 of 1/165 of 1/166 of 1/167 of 1/168 of 1/169 of 1/170 of 1/171 of 1/172 of 1/173 of 1/174 of 1/175 of 1/176 of 1/177 of 1/178 of 1/179 of 1/180 of 1/181 of 1/182 of 1/183 of 1/184 of 1/185 of 1/186 of 1/187 of 1/188 of 1/189 of 1/190 of 1/191 of 1/192 of 1/193 of 1/194 of 1/195 of 1/196 of 1/197 of 1/198 of 1/199 of 1/200 of 1/201 of 1/202 of 1/203 of 1/204 of 1/205 of 1/206 of 1/207 of 1/208 of 1/209 of 1/210 of 1/211 of 1/212 of 1/213 of 1/214 of 1/215 of 1/216 of 1/217 of 1/218 of 1/219 of 1/220 of 1/221 of 1/222 of 1/223 of 1/224 of 1/225 of 1/226 of 1/227 of 1/228 of 1/229 of 1/230 of 1/231 of 1/232 of 1/233 of 1/234 of 1/235 of 1/236 of 1/237 of 1/238 of 1/239 of 1/240 of 1/241 of 1/242 of 1/243 of 1/244 of 1/245 of 1/246 of 1/247 of 1/248 of 1/249 of 1/250 of 1/251 of 1/252 of 1/253 of 1/254 of 1/255 of 1/256 of 1/257 of 1/258 of 1/259 of 1/260 of 1/261 of 1/262 of 1/263 of 1/264 of 1/265 of 1/266 of 1/267 of 1/268 of 1/269 of 1/270 of 1/271 of 1/272 of 1/273 of 1/274 of 1/275 of 1/276 of 1/277 of 1/278 of 1/279 of 1/280 of 1/281 of 1/282 of 1/283 of 1/284 of 1/285 of 1/286 of 1/287 of 1/288 of 1/289 of 1/290 of 1/291 of 1/292 of 1/293 of 1/294 of 1/295 of 1/296 of 1/297 of 1/298 of 1/299 of 1/300 of 1/301 of 1/302 of 1/303 of 1/304 of 1/305 of 1/306 of 1/307 of 1/308 of 1/309 of 1/310 of 1/311 of 1/312 of 1/313 of 1/314 of 1/315 of 1/316 of 1/317 of 1/318 of 1/319 of 1/320 of 1/321 of 1/322 of 1/323 of 1/324 of 1/325 of 1/326 of 1/327 of 1/328 of 1/329 of 1/330 of 1/331 of 1/332 of 1/333 of 1/334 of 1/335 of 1/336 of 1/337 of 1/338 of 1/339 of 1/340 of 1/341 of 1/342 of 1/343 of 1/344 of 1/345 of 1/346 of 1/347 of 1/348 of 1/349 of 1/350 of 1/351 of 1/352 of 1/353 of 1/354 of 1/355 of 1/356 of 1/357 of 1/358 of 1/359 of 1/360 of 1/361 of 1/362 of 1/363 of 1/364 of 1/365 of 1/366 of 1/367 of 1/368 of 1/369 of 1/370 of 1/371 of 1/372 of 1/373 of 1/374 of 1/375 of 1/376 of 1/377 of 1/378 of 1/379 of 1/380 of 1/381 of 1/382 of 1/383 of 1/384 of 1/385 of 1/386 of 1/387 of 1/388 of 1/389 of 1/390 of 1/391 of 1/392 of 1/393 of 1/394 of 1/395 of 1/396 of 1/397 of 1/398 of 1/399 of 1/400 of 1/401 of 1/402 of 1/403 of 1/404 of 1/405 of 1/406 of 1/407 of 1/408 of 1/409 of 1/410 of 1/411 of 1/412 of 1/413 of 1/414 of 1/415 of 1/416 of 1/417 of 1/418 of 1/419 of 1/420 of 1/421 of 1/422 of 1/423 of 1/424 of 1/425 of 1/426 of 1/427 of 1/428 of 1/429 of 1/430 of 1/431 of 1/432 of 1/433 of 1/434 of 1/435 of 1/436 of 1/437 of 1/438 of 1/439 of 1/440 of 1/441 of 1/442 of 1/443 of 1/444 of 1/445 of 1/446 of 1/447 of 1/448 of 1/449 of 1/450 of 1/451 of 1/452 of 1/453 of 1/454 of 1/455 of 1/456 of 1/457 of 1/458 of 1/459 of 1/460 of 1/461 of 1/462 of 1/463 of 1/464 of 1/465 of 1/466 of 1/467 of 1/468 of 1/469 of 1/470 of 1/471 of 1/472 of 1/473 of 1/474 of 1/475 of 1/476 of 1/477 of 1/478 of 1/479 of 1/480 of 1/481 of 1/482 of 1/483 of 1/484 of 1/485 of 1/486 of 1/487 of 1/488 of 1/489 of 1/490 of 1/491 of 1/492 of 1/493 of 1/494 of 1/495 of 1/496 of 1/497 of 1/498 of 1/499 of 1/500 of 1/501 of 1/502 of 1/503 of 1/504 of 1/505 of 1/506 of 1/507 of 1/508 of 1/509 of 1/510 of 1/511 of 1/512 of 1/513 of 1/514 of 1/515 of 1/516 of 1/517 of 1/518 of 1/519 of 1/520 of 1/521 of 1/522 of 1/523 of 1/524 of 1/525 of 1/526 of 1/527 of 1/528 of 1/529 of 1/530 of 1/531 of 1/532 of 1/533 of 1/534 of 1/535 of 1/536 of 1/537 of 1/538 of 1/539 of 1/540 of 1/541 of 1/542 of 1/543 of 1/544 of 1/545 of 1/546 of 1/547 of 1/548 of 1/549 of 1/550 of 1/551 of 1/552 of 1/553 of 1/554 of 1/555 of 1/556 of 1/557 of 1/558 of 1/559 of 1/560 of 1/561 of 1/562 of 1/563 of 1/564 of 1/565 of 1/566 of 1/567 of 1/568 of 1/569 of 1/570 of 1/571 of 1/572 of 1/573 of 1/574 of 1/575 of 1/576 of 1/577 of 1/578 of 1/579 of 1/580 of 1/581 of 1/582 of 1/583 of 1/584 of 1/585 of 1/586 of 1/587 of 1/588 of 1/589 of 1/590 of 1/591 of 1/592 of 1/593 of 1/594 of 1/595 of 1/596 of 1/597 of 1/598 of 1/599 of 1/600 of 1/601 of 1/602 of 1/603 of 1/604 of 1/605 of 1/606 of 1/607 of 1/608 of 1/609 of 1/610 of 1/611 of 1/612 of 1/613 of 1/614 of 1/615 of 1/616 of 1/617 of 1/618 of 1/619 of 1/620 of 1/621 of 1/622 of 1/623 of 1/624 of 1/625 of 1/626 of 1/627 of 1/628 of 1/629 of 1/630 of 1/631 of 1/632 of 1/633 of 1/634 of 1/635 of 1/636 of 1/637 of 1/638 of 1/639 of 1/640 of 1/641 of 1/642 of 1/643 of 1/644 of 1/645 of 1/646 of 1/647 of 1/648 of 1/649 of 1/650 of 1/651 of 1/652 of 1/653 of 1/654 of 1/655 of 1/656 of 1/657 of 1/658 of 1/659 of 1/660 of 1/661 of 1/662 of 1/663 of 1/664 of 1/665 of 1/666 of 1/667 of 1/668 of 1/669 of 1/670 of 1/671 of 1/672 of 1/673 of 1/674 of 1/675 of 1/676 of 1/677 of 1/678 of 1/679 of 1/680 of 1/681 of 1/682 of 1/683 of 1/684 of 1/685 of 1/686 of 1/687 of 1/688 of 1/689 of 1/690 of 1/691 of 1/692 of 1/693 of 1/694 of 1/695 of 1/696 of 1/697 of 1/698 of 1/699 of 1/700 of 1/701 of 1/702 of 1/703 of 1/704 of 1/705 of 1/706 of 1/707 of 1/708 of 1/709 of 1/710 of 1/711 of 1/712 of 1/713 of 1/714 of 1/715 of 1/716 of 1/717 of 1/718 of 1/719 of 1/720 of 1/721 of 1/722 of 1/723 of 1/724 of 1/725 of 1/726 of 1/727 of 1/728 of 1/729 of 1/730 of 1/731 of 1/732 of 1/733 of 1/734 of 1/735 of 1/736 of 1/737 of 1/738 of 1/739 of 1/740 of 1/741 of 1/742 of 1/743 of 1/744 of 1/745 of 1/746 of 1/747 of 1/748 of 1/749 of 1/750 of 1/751 of 1/752 of 1/753 of 1/754 of 1/755 of 1/756 of 1/757 of 1/758 of 1/759 of 1/760 of 1/761 of 1/762 of 1/763 of 1/764 of 1/765 of 1/766 of 1/767 of 1/768 of 1/769 of 1/770 of 1/771 of 1/772 of 1/773 of 1/774 of 1/775 of 1/776 of 1/777 of 1/778 of 1/779 of 1/780 of 1/781 of 1/782 of 1/783 of 1/784 of 1/785 of 1/786 of 1/787 of 1/788 of 1/789 of 1/790 of 1/791 of 1/792 of 1/793 of 1/794 of 1/795 of 1/796 of 1/797 of 1/798 of 1/799 of 1/800 of 1/801 of 1/802 of 1/803 of 1/804 of 1/805 of 1/806 of 1/807 of 1/808 of 1/809 of 1/810 of 1/811 of 1/812 of 1/813 of 1/814 of 1/815 of 1/816 of 1/817 of 1/818 of 1/819 of 1/820 of 1/821 of 1/822 of 1/823 of 1/824 of 1/825 of 1/826 of 1/827 of 1/828 of 1/829 of 1/830 of 1/831 of 1/832 of 1/833 of 1/834 of 1/835 of 1/836 of 1/837 of 1/838 of 1/839 of 1/840 of 1/841 of 1/842 of 1/843 of 1/844 of 1/845 of 1/846 of 1/847 of 1/848 of 1/849 of 1/850 of 1/851 of 1/852 of 1/853 of 1/854 of 1/855 of 1/856 of 1/857 of 1/858 of 1/859 of 1/860 of 1/861 of 1/862 of 1/863 of 1/864 of 1/865 of 1/866 of 1/867 of 1/868 of 1/869 of 1/870 of 1/871 of 1/872 of 1/873 of 1/874 of 1/875 of 1/876 of 1/877 of 1/878 of 1/879 of 1/880 of 1/881 of 1/882 of 1/883 of 1/884 of 1/885 of 1/886 of 1/887 of 1/888 of 1/889 of 1/890 of 1/891 of 1/892 of 1/893 of 1/894 of 1/895 of 1/896 of 1/897 of 1/898 of 1/899 of 1/900 of 1/901 of 1/902 of 1/903 of 1/904 of 1/905 of 1/906 of 1/907 of 1/908 of 1/909 of 1/910 of 1/911 of 1/912 of 1/913 of 1/914 of 1/915 of 1/916 of 1/917 of 1/918 of 1/919 of 1/920 of 1/921 of 1/922 of 1/923 of 1/924 of 1/925 of 1/926 of 1/927 of 1/928 of 1/929 of 1/930 of 1/931 of 1/932 of 1/933 of 1/934 of 1/935 of 1/936 of 1/937 of 1/938 of 1/939 of 1/940 of 1/941 of 1/942 of 1/943 of 1/944 of 1/945 of 1/946 of 1/947 of 1/948 of 1/949 of 1/950 of 1/951 of 1/952 of 1/953 of 1/954 of 1/955 of 1/956 of 1/957 of 1/958 of 1/959 of 1/960 of 1/961 of 1/962 of 1/963 of 1/964 of 1/965 of 1/966 of 1/967 of 1/968 of 1/969 of 1/970 of 1/971 of 1/972 of 1/973 of 1/974 of 1/975 of 1/976 of 1/977 of 1/978 of 1/979 of 1/980 of 1/981 of 1/982 of 1/983 of 1/984 of 1/985 of 1/986 of 1/987 of 1/988 of 1/989 of 1/990 of 1/991 of 1/992 of 1/993 of 1/994 of 1/995 of 1/996 of 1/997 of 1/998 of 1/999 of 1/1000 of 1/1001 of 1/1002 of 1/1003 of 1/1004 of 1/1005 of 1/1006 of 1/1007 of 1/1008 of 1/1009 of 1/1010 of 1/1011 of 1/1012 of 1/1013 of 1/1014 of 1/1015 of 1/1016 of 1/1017 of 1/1018 of 1/1019 of 1/1020 of 1/1021 of 1/1022 of 1/1023 of 1/1024 of 1/1025 of 1/1026 of 1/1027 of 1/1028 of 1/1029 of 1/1030 of 1/1031 of 1/1032 of 1/1033 of 1/1034 of 1/1035 of 1/1036 of 1/1037 of 1/1038 of 1/1039 of 1/1040 of 1/1041 of 1/1042 of 1/1043 of 1/1044 of 1/1045 of 1/1046 of 1/1047 of 1/1048 of 1/1049 of 1/1050 of 1/1051 of 1/1052 of 1/1053 of 1/1054 of 1/1055 of 1/1056 of 1/1057 of 1/1058 of 1/1059 of 1/1060 of 1/1061 of 1/1062 of 1/1063 of 1/1064 of 1/1065 of 1/1066 of 1/1067 of 1/1068 of 1/1069 of 1/1070 of 1/1071 of 1/1072 of 1/1073 of 1/1074 of 1/1075 of 1/1076 of 1/1077 of 1/1078 of 1/1079 of 1/1080 of 1/1081 of 1/1082 of 1/1083 of 1/1084 of 1/1085 of 1/1086 of 1/1087 of 1/1088 of 1/1089 of 1/1090 of 1/1091 of 1/1092 of 1/1093 of 1/1094 of 1/1095 of 1/1096 of 1/1097 of 1/1098 of 1/1099 of 1/1100 of 1/1101 of 1/1102 of 1/1103 of 1/1104 of 1/1105 of 1/1106 of 1/1107 of 1/1108 of 1/1109 of 1/1110 of 1/1111 of 1/1112 of 1/1113 of 1/1114 of 1/1115 of 1/1116 of 1/1117 of 1/1118 of 1/1119 of 1/1120 of 1/1121 of 1/1122 of 1/1123 of 1/1124 of 1/1125 of 1/1126 of 1/1127 of 1/1128 of 1/1129 of 1/1130 of 1/1131 of 1/1132 of 1/1133 of 1/1134 of 1/1135 of 1/1136 of 1/1137 of 1/1138 of 1/1139 of 1/1140 of 1/1141 of 1/1142 of 1/1143 of 1/1144 of 1/1145 of 1/1146 of 1/1147 of 1/1148 of 1/1149 of 1/1150 of 1/1151 of 1/1152 of 1/1153 of 1/1154 of 1/1155 of 1/1156 of 1/1157 of 1/1158 of 1/1159 of 1/1160 of 1/1161 of 1/1162 of 1/1163 of 1/1164 of 1/1165 of 1/1166 of 1/1167 of 1/1168 of 1/1169 of 1/1170 of 1/1171 of 1/1172 of 1/1173 of 1/1174 of 1/1175 of 1/1176 of 1/1177 of 1/1178 of 1/1179 of 1/1180 of 1/1181 of 1/1182 of 1/1183 of 1/1184 of 1/1185 of 1/1186 of 1/1187 of 1/1188 of 1/1189 of 1/1190 of 1/1191 of 1/1192 of 1/1193 of 1/1194 of 1/1195 of 1/1196 of 1/1197 of 1/1198 of 1/1199 of 1/1200 of 1/1201 of 1/1202 of 1/1203 of 1/1204 of 1/1205 of 1/1206 of 1/1207 of 1/1208 of 1/1209 of 1/1210 of 1/1211 of 1/1212 of 1/1213 of 1/1214 of 1/1215 of 1/1216 of 1/1217 of 1/1218 of 1/1219 of 1/1220 of 1/1221 of 1/1222 of 1/1223 of 1/1224 of 1/1225 of 1/1226 of 1/1227 of 1/1228 of 1/1229 of 1/1230 of 1/1231 of 1/1232 of 1/1233 of 1/1234 of 1/1235 of 1/1236 of 1/1237 of 1/1238 of 1/1239 of 1/1240 of 1/1241 of 1/1242 of 1/1243 of 1/1244 of 1/1245 of 1/1246 of 1/1247 of 1/1248 of 1/1249 of 1/1250 of 1/1251 of 1/1252 of 1/1253 of 1/1254 of 1/1255 of 1/1256 of 1/1257 of 1/1258 of 1/1259 of 1/1260 of 1/1261 of 1/1262 of 1/1263 of 1/1264 of 1/1265 of 1/1266 of 1/1267 of 1/1268 of 1/1269 of 1/1270 of 1/1271 of 1/1272 of 1/1273 of 1/1274 of 1/1275 of 1/1276 of 1/1277 of 1/1278 of 1/1279 of 1/1280 of 1/1281 of 1/1282 of 1/1283 of 1/1284 of 1/1285 of 1/1286 of 1/1287 of 1/1288 of 1/1289 of 1/1290 of 1/1291 of 1/1292 of 1/1293 of 1/1294 of 1/1295 of 1/1296 of 1/1297 of 1/1298 of 1/1299 of 1/1300 of 1/1301 of 1/1302 of 1/1303 of 1/1304 of 1/1305 of 1/1306 of 1/1307 of 1/1308 of 1/1309 of 1/1310 of 1/1311 of 1/1312 of 1/1313 of 1/1314 of 1/1315 of 1/1316 of 1/1317 of 1/1318 of 1/1319 of 1/1320 of 1/1321 of 1/1322 of 1/1323 of 1/1324 of 1/1325 of 1/1326 of 1/1327 of 1/1328 of 1/1329 of 1/1330 of 1/1331 of 1/1332 of 1/1333 of 1/1334 of 1/1335 of 1/1336 of 1/1337 of 1/1338 of 1/1339 of 1/1340 of 1/1341 of 1/1342 of 1/1343 of 1/1344 of 1/1345 of 1/1346 of 1/1347 of 1/1348 of 1/1349 of 1/1350 of 1/1351 of 1/1352 of 1/1353 of 1/1354 of 1/1355 of 1/1356 of 1/1357 of 1/1358 of 1/1359 of 1/1360 of 1/1361 of 1/1362 of 1/1363 of 1/1364 of 1/1365 of 1/1366 of 1/1367 of 1/1368 of 1/1369 of 1/1370 of 1/1371 of 1/1372 of

EXAMINATIONS IN LONDON.

We have received from the Registrar of the Pharmaceutical Society of Great Britain the following list of candidates who were granted certificates at the October meeting of the London Board of Examiners:—

MAJOR EXAMINATION.

Twenty-one candidates were examined. Fourteen failed. The undermentioned seven passed, and were declared qualified to be registered as Pharmaceutical Chemists:—

Brown, James, London	Hunt, John Lambert, Chesterfield
Cameron, Lauchlan, Brighton	Walden, William Herbert, Reedham
Chaston, William Robert, Norwich	Willmott, Alfred Wade, Darlington
Hulme, Thomas, Manchester	

MINOR EXAMINATION.

One hundred and eighty-one candidates were examined. One hundred and eighteen failed. The undermentioned sixty-three passed, and were declared qualified to be registered as Chemists and Druggists:—

Akam, Arthur, Bradford	Howorth, Henry Cook, Preston
Ashfield, Percy John, Stratford-on-Avon	Hughes, Thomas John, Bethesda
Barker, George, Bedale	Inglis, Frank, Delph
Baron, Richard Edward, Guernsey	Jackson, Thomas, Preston
Birnie, Arthur William, Christchurch	James, James Richards, London
Boreham, Walter Herbert, Lee	Jeffries, Charles, Nunhead
Bosustow, F. Samuel Mathews, Penzance	Jewell, Harry, Salisbury
Bowen, Isaac, Llangammarch	Jones, Alfred Morgan, Cefn Coed
Brown, Richard Moss, Nottingham	Lee, George, Barnstaple
Burgess, Arthur Leland, Guernsey	Leitch, William Alfred, London
Burton, Alfred Henry, Llandilo	MacLachlan, Hugh, London
Calvert, Albert Boston, Southwark	Marshall, Henry Raynold, Wareham
Carter, James Charles, Hastings	Maskew, William, Easingwold
Clarke, Arthur Bertram, Coventry	Millman, Thomas Richard, Barnstaple
Cooke, William Arthur, Hemel Hempstead	Rose, Alfred, London
Cooper, Frederick, Ticehurst	Rossiter, Robert Tapley, Paignton
Dickson, David, Salford	Smith, Hedley Crossley, Uxbridge
Elphinstone, Joseph Lawson, Aberdeen	Southall, Alfred William, Birmingham
Evans, Moses Thomas, Llanelly	Spearing, Arthur John, Weston-super-Mare
Eyres, John Ernest, Southsea	Steggles, George, Petworth
Francis, Arthur Llewelyn, Wrexham	Stephens, John Richard Cook, Swindon
George, Henry Attwood, Pontypridd	Stone, Ernest Frederick, Exeter
Halen, Thomas Henry, Barnsley	Taylor, Walter, Gainsborough
Hanna, George Henry, London	Tredgold, Alfred Frank, Derby
Hardy, George Bonnor, Parkstone	Turton, Edwin Evelyn Harrison, Nottingham
Hare, Arthur, Newcastle-on-Tyne	Wade, Thomas, Oldham
Harper, John Thomas, Market Drayton	Waite, Herbert Shuttleworth, Bradford
Harris, John George, Nottingham	Wathes, Charles John, Leicester
Harvey, Thomas Featherstone, Sileby	Watkins, Horatio Ernest, Oxford
Hill, Lawrence, Sheffield	Watson, Henry, Spennymoor
Horsley, Frederick Samuel, Woodbridge	Weatherley, William Ralph, Knaresborough
	Williams, Llewelyn, Bala

MODIFIED EXAMINATION.

One candidate was examined; and failed.

THE CHEMISTS' ASSISTANTS' ASSOCIATION.

THE sixteenth session of the Chemists' Assistants' Association was opened on Thursday, October 6, at which Mr. Frank A. Rogers, the new President, delivered his inaugural address. He said he felt deeply grateful for the honour the Council had done him by unanimously voting him to the chair. As far as it depended on him they should have no cause to regret it. He did not offer himself as an original investigator, but as a true representative of "the retail." He hoped, therefore, that on those evenings devoted to short papers members would bring forward any notes or difficulties in dispensing or retail work. Let no one consider himself too unimportant to take an active part in the work.

We cannot all be corner-stones; but there are many small bricks in every building, and upon them its strength depends. The Association had made a place for itself, and this place must be maintained; the objects in view were the same as in former years, but the energy thrown into them was greatly increased year by year. Their papers were not always purely scientific; often they were very practical. Could not even more assistants be present at the meetings? He appealed to principals to let Thursday be their early-closing day, so as to make it a free evening, if not every week, perhaps every other week. Year after year the formation of a chemists' club had been entertained, but had always fallen through, partly because of the difficulties surrounding its working; partly, he ventured to hope, through the attractiveness of their own Association. An Assistants' Union had also been talked of. With reference to this, he said, a discussion by correspondence had gradually evolved itself in THE CHEMIST AND DRUGGIST, from an embryo of discontent on the one hand and mistrust on the other, into the nucleus of a satisfactory understanding between both parties, and had had far-reaching influence. Recognising this, an evening had been set apart early in the session for a friendly discussion of the difficulties, to which all interested in their solution were cordially invited. It was a matter of distinct regret that last session they were unable to award the medals and prizes of the Association. To make these awards when the papers sent in were of inferior merit would merely belittle their value; this year they were again offered for competition, and he would urge all members to compete, to ensure their being awarded. The Research Prize consisted of a silver medal and 5/, for the best pharmaceutical investigation published during the year by any member. The Essay Prize consisted of a silver medal, 5/, and a copy of Remington's "Pharmacy," for the best essay on "Recent Advance in Pharmacy." He hoped that an evening would be found in the latter half of the session for a discussion on the hearings of recent decisions in the poison cases, with reference to the 15th section of the Pharmacy Act. At present the decision in the well-known chlorodyne case was merely a magistrate's dictum, and needed confirmation. In conclusion he drew attention to the programme. He hoped this session would be as successful as any in the past, and that a brilliant future was in store for the Association.

A vote of thanks to Mr. Rogers was proposed by Mr. Helbing, who said the value of the Association could not be over-estimated, and that many of the members had sent good work out to the world. He would only mention the paper by Mr. Campbell Stark on the incompatibles of antipyrin, which was in the hands of every pharmacist on the Continent, and had been of the greatest service to them.

Mr. Lloyd Williams seconded the vote, saying that Mr. Rogers had made such a good lieutenant when he himself was president that he had no doubts as to his success as leader.

The vote was carried by acclamation.

Business Changes.

MESSRS. J. TYE & SON, gelatine-capsule makers, formerly of 5 Little Cross Street, N., have removed to 108 Packerington Street, N.

MR. ADAM D. CLARK, formerly of Dumfries, is now the proprietor of the drug business in Crewe lately carried on by Mr. W. Bayley.

MR. GEORGE VENABLES has succeeded to the business carried on for many years by the late Mr. Gabriel French, chemist, at 148 High Street, Chatham.

"AL. HUFF."—It sounds queer, but is simply the name of an American pharmacist. Perhaps it feels better to be Al. Huff than A. Huff.

INSTITUTE OF CHEMISTRY EXAMINATIONS.—Training at the McGill College, University of Montreal, under Professor G. P. Girdwood, is now recognised for the Associate Examination of the Institute of Chemistry of Great Britain.

Pharmaceutical Society of Ireland.

THE monthly meeting of the Council was held on October 5, at 67 Lower Mount Street, Dublin, at 3 P.M. Present: Mr. William Hayes (President), and Messrs. Beggs (Vice-President), Baxter, Boyd, Dr. Burnes, Conyngham, Downes, Evans, Gibson, Grindley, Johnston, Lyons, Merrin, Montgomery, Simpson, Wells, and Whitla.

The minutes of the last monthly meeting, and of the special meeting held subsequently for the election of members, were read.

THE REJECTED NOMINATIONS.

A question arose whether the names of the gentlemen proposed for election as Associate Druggists by Mr. Boyd at the special meeting, but whose election had fallen through in consequence of no quorum being present when the nominations were made at the preceding meeting, should appear on the minutes at the special meeting.

Mr. BOYD thought there should be some record of the names.

Mr. BEGGS said he had taken legal advice on the matter, and had been informed that the moment there ceased to be a quorum in consequence of members going away, no business could be done.

The PRESIDENT said he had no doubt the monthly meeting had terminated before the names were handed in.

After some discussion it was decided that the names ought not to form part of the minutes.

ELECTION OF A COUNCILLOR.

The CHAIRMAN said the first business was the election of a member of Council in place of the late Mr. Alexander E. Doran.

Mr. MONTGOMERY moved that Mr. Samuel Turkington, associate druggist, be co-opted. Mr. Turkington had been unsuccessful at the late election, and that was a reason why the vacant seat on the Council should be given to him. He (Mr. Montgomery) had known him for twenty years, and he believed that he had the entire confidence of the druggists, and would make an excellent member of the Council.

Mr. BAXTER seconded the motion.

Mr. WELLS said he had pleasure in supporting it, but upon the understanding that Mr. Turkington's co-option, under the circumstances of the case, was not to form a precedent. An understanding had been come to—although he did not say that it was strictly binding—that when vacancies occurred on the Council, a druggist was to be replaced by a druggist, and a pharmaceutical chemist by a pharmaceutical chemist. But, having regard to the result of the late election, and after consultations, the conclusion had been arrived at that a druggist should be co-opted. Had things been done a little differently before the election, a few druggists would have been elected; but the gauntlet having been thrown down and an attempt having been made to put off some of the most active workers on the Council, nothing was left to the pharmaceutical chemists but to take up the challenge, and they had done so with the result that was known. However, he believed he spoke not only for the pharmaceutical chemists present, but for the licentiates of the Society generally, when he said that they all wished to see Mr. Turkington on the Council. He (Mr. Wells) was not acquainted with him personally, but he had heard strong recommendations in his favour. One was that he was a man who would uphold the law, and support the rest of the Council in protecting the interests of both the licentiates of the Society and the druggists.

Mr. BOYD said he rose for the purpose of expressing his gratification at this kindness on the part of the majority of the Council in nominating for the vacant position an associate druggist. He was sure that that act of grace would be appreciated. He had, however, one fear on the subject, and that was that the selection of Mr. Turkington would have the appearance of a slight upon Sir James Haslett for whom a larger number of votes had been recorded at the election than for Mr. Turkington. Perhaps, therefore, it would be better to nominate Sir James Haslett, who stood extremely high in the trade in Belfast and did good service

at the time of the passing of the Amendment Act. Another consideration was that Mr. Turkington lived in the extreme North of Ireland, and therefore, he feared, would not be a regular attendant at the Council meetings though he might be mistaken on that point.

Mr. GRINDLEY said their principal reason for supporting Mr. Turkington was that he was an independent member of the retail trade—(hear, hear)—and a man in thorough sympathy with all their aims and objects. He meant no disrespect to the wholesale druggists on the Council when he said he did not think they were in touch with the retail trade. Their interests were not the same. Sir James Haslett should have no difficulty in seeing that the Council were acting from right motives.

The PRESIDENT said Mr. Turkington living at such a distance from Dublin might be to some extent a drawback; but his (Mr. Hayes's) experience of the gentlemen of the North was that they were not daunted by distance when their presence was necessary in Dublin. He felt great pleasure that they had it in their power to co-opt a gentleman from amongst the registered druggists. Personally he should have liked to see a larger number of druggists on the board. Lately when the gauntlet was thrown down and an attempt was made to turn six pharmaceutical chemists off the board nothing was left to the latter but to do their utmost to retain their seats. And he did not think their friends the registered druggists would think badly of them for this. He was sure that when they should find the druggists were ready to meet them and to do their duty as faithfully as the pharmaceutical chemists had endeavoured to do theirs, they would be found willing to receive as many druggists as seats could be found for on the board. (Hear, hear.) When all saw it was their interest as well as their duty to put down breaches of the law, they would be of one heart and mind in the matter.

The motion for the co-option of Mr. Turkington then passed unanimously.

ELECTION OF OFFICERS.

Mr. CHARLES EVANS moved that Mr. William Hayes be re-elected President for the ensuing year. (Applause.) They all knew how he had worked during the last twelve months and the amount of time and attention that he had given to the affairs of the Society, and they were to be congratulated on being able to retain the services of such a gentleman as their chairman.

Dr. BURNES seconded the motion, which was put by Mr. Beggs and unanimously carried amid applause.

Mr. HAYES in acknowledging the honour bestowed upon him, said it was scarcely his wish to retain the office, but as he found it to be the wish of his co-councillors that he should do so, he made no objection, and would therefore endeavour to do his duty without fear or favour to the best of his ability. (Applause.)

Mr. WELLS moved the re-election of Mr. Beggs as Vice-President. Mr. GRINDLEY seconded the motion, which passed unanimously. Mr. BEGGS briefly returned thanks.

Dr. BURNES moved that Mr. Hodgson be re-elected Treasurer. Mr. BAXTER seconded the motion, and the PRESIDENT, in putting it, said Mr. Hodgson had been their Treasurer since the establishment of the Society. The motion passed unanimously. On the motion of Mr. DOWNES, seconded by the VICE-PRESIDENT, Messrs. Simpson and Grindley were elected auditors.

COMMITTEES.

Mr. WELLS moved that Messrs. Charles Evans, Grindley, Downes, Professor Tichborne, and Wells, constitute the Law Committee for the ensuing year.

Mr. MERRIN seconded the motion.

Mr. GIBSON said he thought the druggists should have a member of their body on the Law Committee. They had been met very fairly, he confessed, by the co-option of Mr. Turkington, and he suggested that the Council should go a little farther and place that gentleman on the Law Committee.

Mr. CONYNHAM said an associate druggist might find himself in an unpleasant position on the Law Committee if it should be called on to deal with some of his friends.

Mr. GIBSON suggested that Mr. Boyd should be placed on the committee in question.

Mr. BOYD: I am much obliged, but I would much prefer

not to act on the Law Committee. Perhaps Mr. Conyngham would allow himself to be placed on it?

Mr. CONYNTHAM: I would rather not.

Mr. BOYD: It would gratify us if he did.

The PRESIDENT: If Mr. Boyd puts it in that way, I would suggest that the name of Mr. Conyngham be added to the committee.

Mr. GIBSON: If Mr. Boyd does not wish to act I propose Mr. Turkington. The Law Committee has not alone to look after people about dispensing, but also looks after the sale of poisons, and we are as much interested in that as the pharmaceutical chemists.

Mr. WHITLA agreed that the druggists should have a representative on the Law Committee, but he thought that Mr. Gibson would make a better representative on it than Mr. Turkington, who was only newly elected to the Council. He moved that Mr. Gibson be placed on the committee.

Mr. BOYD seconded.

Mr. WELLS said he desired to live at peace with everyone, but he could not tacitly listen to a proposal that would, in the end, prevent the law from being carried out. (Hear.) He knew from the letters of a great many druggists that they had confidence in the pharmaceutical chemists. Unfortunately, they had not yet been assured that the representatives of the druggists on the Council were prepared to help them to see the Pharmacy Acts fairly administered. Without meaning any disrespect to Mr. Gibson, he would ask him to bear in mind that only a very little time ago they prosecuted a friend of his, and Mr. Gibson sat beside him in court. He (Mr. Wells) must protest against a member of the druggists' body being put on the Law Committee, for the present at all events.

After some further discussion, the following gentlemen were unanimously elected the Law Committee: Messrs. Charles Evans, Grindley, Downes, Wells, Montgomery, Sunner, and Conyngham.

On the motion of Mr. WHITLA, the following were elected the Certificates Committee for pharmaceutical chemists: Messrs. Conyngham, C. Evans, Grindley, Simpson, and Sunner.

On the motion of Mr. BAXTER, seconded by Mr. WHITLA, the following were unanimously elected the House and General Purposes Committee: Messrs. Downes, Boyd, Grindley, C. Evans, Hodgson, Wells, and Professor Tichborne.

On the motion of the VICE-PRESIDENT, the following were unanimously elected the School Committee: Messrs. Grindley, Hodgson, Tichborne, Dr. Burnes (hon. treasurer), Downes, Wells, and Boyd.

On the motion of Mr. CONYNTHAM, seconded by Mr. MERRIN, the following were unanimously elected the Declarations Committee: Messrs. Boyd, Gibson, Grindley, Montgomery, and Wells.

THE COUNCIL AND THE CASTLE.

The next subject on the agenda paper was the correspondence between the President and the Lords Justices of Ireland in reference to the case of Mr. Cosgrave, chemist and druggist, which has already been published.

The PRESIDENT: Gentlemen, you have already seen these letters in the journals; do you desire that they should be read now?

Mr. WELLS: We may take them as read.

CORRESPONDENCE.

A letter was read from Mr. Arthur L. Doran thanking the Council for their kind expression of condolence with him and his family on the occasion of the death of his father, Mr. A. E. Doran.

A letter from Messrs. Casey & Clay, solicitors to the Council, stated, in reference to the case of Messrs. Boyd & Goodwin, that the defendants had served notice that they did not intend to proceed further with their appeal against the decision of the magistrates, and that they had paid a proportion of the penalties.

A letter was read from Mr. Spencer Todd, Agent-General of the Cape of Good Hope Government, accompanying which were copies of the *Cape Government Gazette*, containing medical and pharmacy regulations in force in that colony.

A letter from Mr. L. J. Nightingale, secretary to the Pharmacy Board of Cape Colony, enclosed a copy of the regulations of that Board, under which the certificates of the Pharmaceutical Societies of Great Britain and of Ireland are accepted by the Board as sufficient evidence of the competency of any person holding same to practise as a chemist and druggist in the Colony without further examination. The writer stated that the Board would always be glad to keep in touch with the Pharmaceutical Society of Ireland, and requested a copy of the register for the current year.

Mr. FERRALL said he had already forwarded a copy of the Calendar to the secretary of the Cape Pharmacy Board.

The PRESIDENT said it was very gratifying to find their Society recognised all over the world. He only wished they received the same help from their Government that the pharmaceutical societies of other lands did from theirs.

Mr. DOWNES moved a resolution thanking the Pharmacy Board of the Cape of Good Hope for their communication, and stating that the Council would always be happy to reciprocate their disposition to fraternise.

Mr. CHARLES EVANS seconded the resolution, which was unanimously agreed to.

Reports from the Law Committee, Certificates Committee, and House and General Purposes Committee, were adopted.

APPLICATIONS FOR REGISTRATION AS DRUGGISTS.

The REGISTRAR submitted a list of seventeen names of applicants for registration as druggists under the Amendment Act which were still remaining undisposed of. This list was furnished at the request of Mr. Boyd.

The PRESIDENT: All these gentlemen have been written to for further information as to their qualifications, and in the event of their not furnishing it their fees will be returned.

Mr. BOYD: I think the sooner something definite is done with respect to their cases the better. They should be either accepted or rejected.

The PRESIDENT: I quite agree with you.

Mr. BOYD: I think that before their fees are sent back it might be well to give them another chance.

Mr. GIBSON: Give them seven days more, and if they don't supply the requisite information within that time let their names be struck off.

The REGISTRAR was directed to write to the applicants to that effect.

Mr. BAXTER moved that the following gentlemen be nominated as associate druggists:—Mr. Robert Holmes and Mr. John Sanderson, both of Ballymena.

TRAVELLING EXPENSES.

Mr. Whitla suggested that it would be reasonable for the Council to pay the railway fares of its members who came from the country to attend its meetings. This was done by the English Society.

Mr. WELLS said he would give a notice of motion on the subject for the next Council meeting.

THE REGISTRAR.

Mr. WELLS moved that the best thanks of the Society be given to the Registrar, Mr. Ferrall, for the manner in which he had performed his duties during the past year. Mr. Ferrall had a great deal of work to do under the Amendment Act.

Mr. GIBSON seconded the motion. In all that he had had to do with the Registrar he found him very pleasant and most willing to oblige. He was a very worthy officer. (Applause.)

The PRESIDENT said that, as one who had had more to do with Mr. Ferrall than other members of the Council, he could speak from experience of him, and he must say that he could not have occupied his own position if he had not had at this post a man like Mr. Ferrall, whom he could implicitly trust, and who, he felt, would do his duty faithfully and efficiently. It gave him great pleasure to ask them to pass this motion by acclamation. (Applause.)

Mr. FERRALL briefly responded, and said he would try to serve them faithfully as long as he was there.

The Council then adjourned.

PRELIMINARY EXAMINATION.

October 3, 1892.

The following were the papers set:—

ALGEBRA.

(Candidates under New Regulations.)

E. MacDowel Cosgrave, M.D., F.R.C.P.

1. Simplify the following:—

$$15x - \{4 - [3 - 5x - (3x - 7)]\}.$$
2. Divide $9x^3 + 3x^2 + x - 1$ by $3x - 1$.
3. Multiply $(x^2 + xy + y^2)$ by $(x^2 + xy - y^2)$.
4. $\frac{2x-6}{3x-8} = \frac{2x-5}{3x-7}$, find the value of x .

ENGLISH GRAMMAR AND COMPOSITION.

(All Candidates.)

E. MacDowel Cosgrave, M.D., F.R.C.P.

1. Give the past tense and past participle of hang, burst, teach, eat, shear, thrive.
2. How do you distinguish between prepositions, adverbs, and conjunction? Give examples.
3. Parse the following sentence:—
 "As you value the life of King William, do not let him hunt to-morrow."
4. Give six prefixes and six affixes, with their derivations.
5. When is a verb said to be in the infinitive mood?
6. Write an essay on either of the following subjects:—
 Electric lighting. Autumn. Emigration.

LATIN.

(All Candidates.)

E. MacDowel Cosgrave, M.D., F.R.C.P.

1. Translate either of the following passages:—

VIRGIL.

Quare agite, O tectis, juvenes, succedite nostris!
 Me quoque per multos similis fortuna labores
 Jactatam hac demum voluit consistere terra.
 Non ignara mali, miseris succurrere disco.
 Sic memorat, simul Enean in regia ducit
 Tecta, simul divum temples inducit honorem.

CÆSAR.

Ex concilio dimisso, iidem principes civitatum, qui ante fuerant ad Cæsarem, reverterunt, petieruntque, uti eibi secreto de sua omniumque salute cum eo agere liceret. Ea re impetrata, sese omnes fientes Cæsari ad pedes projecerunt; non minus se id contendere et laborare, ne ea quae dixissent enuntiarentur, quam uti ea quae vellent impetrarent; propterea quod, si enuntiatum esset, summum in cruciatum se venturos viderent.

2. Parse the words in italics in the chosen passage.
3. What is meant by a Deponent Verb? Give an example.
4. Define the following:—Tense, mood, voice, finite verb.

CHEMISTRY.

(Optional Subject—New Regulations)

E. MacDowel Cosgrave, M.D., F.R.C.P.

1. How can the composition of water be shown:—(a) By analysis; (b) by synthesis.
2. What is the meaning of the following terms:—(a) acid, (b) salt, (c) base, (d) oxy-acid.
3. How is HCl obtained? What are its properties?
4. Ammonia can be obtained from quicklime and sal-ammoniac. Give the reaction.
5. What is sulphur dioxide? How can it be obtained, and what are its properties?

ARITHMETIC—WEIGHTS AND MEASURES.

(All Candidates.)

E. MacDowel Cosgrave, M.D., F.R.C.P.

1. Divide $16\frac{100}{151}$ by $\frac{48}{49}$.
2. How many minutes are there in 46 years, 21 days, 8 hours, 56 minutes (not taking leap years into account)?
3. What is the value of 0.86875?
4. What is the interest of 72*l.* 6*s.* 4*d.*, for 8 months, at 6 per cent.?
5. How many English miles are there in 17,297,280 inches?
6. How many grains are there in—(a) An avoirdupois ounce? (b) an avoirdupois pound?
7. A man weighs 11 st. 3 lbs. How many kilogrammes does he weigh?
8. A man measures 1.76 metres. What is his height in English measures?

BOTANY.

(Candidates under Old Regulations—Optional)

Subject under New Regulations.)

E. MacDowel Cosgrave, M.D., F.R.C.P.

1. What are the functions of leaves? How are these functions performed in plants which are apparently leafless?
2. Explain the meaning of the following terms:—Cyme, stipule, peduncle, floral receptacle.
3. Describe the flower and the fruit of the poppy.
4. What is the difference between simple and compound leaves? Give examples of each.

PHYSICS AND CHEMISTRY.

(Candidates under Old Regulations.)

E. MacDowel Cosgrave, M.D., F.R.C.P.

1. Describe accurately the structure of a spirit-level. What physical law makes it act?
2. Describe the structure of a mercurial barometer.
3. What is Boyle's law? If the volume of a gas is 270 cubic inches at a pressure of 27 lbs., what will its volume be if the pressure be raised to 30 lbs.?
4. Describe the flame of an ordinary candle, and explain why different parts of it have different appearances.
5. What is sulphuretted hydrogen? What are its properties? How is it prepared?
6. What is HCl? How is it prepared? What are its characters?

ELEMENTARY PHYSICS AND MECHANICS.

(Optional Subject—New Regulations.)

E. MacDowel Cosgrave, M.D., F.R.C.P.

1. What are the laws of the pendulum?
2. Illustrate and explain some of the principal phenomena of capillary attraction.
3. Give some examples of the practical application of centrifugal force.
4. How is it that a greenhouse becomes much hotter in summer than the surrounding air?
5. Why is the sound of a tuning-fork louder when it is placed on a box?
6. Describe and explain any arrangement for determining the relative strength of two lights.

MILK-AND-WATER is said to be the best thing for keeping linoleum bright. At 6*d.* a quart it appears a trifle expensive. As chemists, we should think sixpennyworth of furniture-polish would go farther.

THE FIRST HALF-OUNCE OF QUININE which ever got into the United States was received, says the *Phar. Era*, by Mr. J. Milhau, chemist, of 183 Broadway, New York. The business started there in 1830 by that gentleman is still carried on by his son Mr. Edward L. Milhau.

Legal Reports.

UNQUALIFIED SELLER OF POISONS.

WE reported briefly last week an action in the Birmingham County Court against Alice Ada Young, brought by the Pharmaceutical Society. The defendant is the wife of Mr. Thomas Young, who trades as the Aston Drug Company. A summons for four penalties had been issued against Mr. Young for selling poisons without being duly qualified, but the case was adjourned. Plaintiffs' counsel (Mr. Gray) said that an agent of the Pharmaceutical Society had made purchases from Mrs. Young on March 15, April 2, and May 30. On the first occasion he asked to be supplied with oxalic acid, on the second for a preparation of belladonna, and on the third he purchased some oxalic acid. On analysis it was found that the purchases from Mrs. Young were innocent of poison and did not contain the substance which had been asked for. In the third case, however, oxalic acid was really supplied. Mr. Price, who appeared for the defence, said the customer was known, and he was purposely supplied with non-poisonous materials. If oxalic acid was supplied on the last occasion it was an accident. Mr. Gray said that by supplying a different article to that demanded defendant had rendered herself liable to a penalty of 50%. Mr. Gray produced the register, which did not contain the name of Mrs. Young. George S. Pitsley said that on May 30 he called at the Aston Drug Company's shop and asked Mrs. Young for a pennyworth of oxalic acid. She gave him an ounce packet. The Judge: Did you take any of it? (Laughter.) Witness: No. Mr. Price: This is not the first time you have acted as a spy for the Pharmaceutical Society? Mr. Gray: I object to such questions. Mr. Price: Is this the first case in which you have acted as informer? Mr. Gray said he objected to the question. His Honour said he did not see anything objectionable in the question. Mr. Price: When you went to the shop you represented to Mrs. Young that you were a friend of theirs. Witness: No. But you told them that you intended giving them tickets for the Winter Gardens? (Laughter.)—Something was said about that. Mr. Moon, in the employ of the Pharmaceutical Society, said he had analysed the packet bought by Pitsley, and found that it contained oxalic acid. Mr. Price did not call the defendant. He said that so far as she was concerned it was news to her that the packet contained oxalic acid. She did not intend to supply poison in any of the three cases. He would submit to judgment for 5% in the case that had been gone into. The Judge said there must be judgment for that amount, adding that the case showed the danger of an unlicensed person selling drugs if she did not know whether she was selling poison or not. Mr. Price: But Pitsley represented that he was a friend of the family. The Judge: Yes, but it is a dangerous thing to supply poison even to the members or friends of a family. (Laughter.) She handed him anything out of any bottle he liked. Mr. Price said a registered chemist went down every week in order to attend to the sale of poisons, and in his absence— The Judge: It is exactly the same as Dickens's juryman. (Laughter.) While his mother was away the boy was left in charge, and handed out poisons all round. There must be judgment against the defendant, but unless she has a separate estate there will be nothing to levy upon. The case shows how recklessly poisons are dealt with. Verdict for plaintiffs for 5%.

ACTION UNDER THE POISONED GRAIN ACT.

AT the Hastings Police Court, on October 8, Samuel Thomas Morris was summoned by the R.S.P.C.A. for placing in an exposed place grain steeped in poison. Evidence was given that defendant had said to a little girl living at a house adjoining his, "If you find your ducks dead, tell your mother not to blame me, because I put poison on my garden." Inspector Fair detailed an interview with the defendant, who denied laying poison round the garden, but said he laid it round the manure-heap. It was, he said, rat-poison, and oats steeped in oxalic acid to kill cats, dogs, chickens, ducks, or anything that came on to his ground.

Mr. Atkinson said his case was that the oats were put down for the purpose of killing rats, with which defendant's stable was overrun. His client only buried one handful of oats. A lad dug it up and threw it in the garden. William Vidgen, Morris's apprentice, said he saw a boy named Thorn dig some of the oats up and throw it on the garden. The Magistrates fined defendant 3% and all costs, total 4% 14s., and intimated that in any future cases the full penalty, 10%, would be inflicted.

THE MEDICINE-LICENCE.

RICHARD AYRISS, patent-medicine vendor, of 116 Lockwood Road, Huddersfield, was summoned at the Huddersfield Police Court, on Wednesday morning, for selling certain medicines liable to stamp-duty without a licence. Mr. Lee (supervisor of Excise) conducted the prosecution. The purchase of a bottle of medicine was proved by an Inland Revenue officer.

Defendant: The contents of the bottle produced are for outward application, and that is not medicine.

Mr. Lee said the defendant was liable whether the medicine was for internal or external use.

Mr. Mills (magistrate's clerk), after reading the portion of the Act bearing on the point, decided that this was so.

Mr. Lee handed up to the magistrates the bottle purchased. It was labelled "Handyside's Rheumatic Cure," and the mere fact of the Government stamp being upon it rendered it liable. If the stamp was necessary the licence also was necessary.

Mr. J. A. Wallace (another Inland Revenue officer) stated that on July 25 defendant applied for a licence to sell patent medicines from the Red Lion Inn, Lockwood, and it was granted. Witness distinctly told him that he could only sell from the one place with it.

Defendant said he had been accustomed in other towns to sell from various places with only one licence.

Mr. Lee explained that up to three or four years ago one licence was sufficient to enable a man to sell at as many places as he liked in one town, but the law now required that for every separate premises there must be a separate and distinct licence. If a man had shops only two doors apart he would require a separate licence for each. The defendant's premises, which bore the appearance of a chemist's shop, were about 400 yards away from the place for which he held a licence.

In reply to the charge defendant said he had never sold a bottle of medicine from the shop, neither had he given anyone permission to do so. All he did was to store it there.

Mr. Mills said the defendant should not have kept the medicine in the shop.

Mr. Lee asked for a substantial penalty. Defendant was a man who drove about in a painted chariot, and might be here to-day and gone to-morrow.

The Bench inflicted a fine of 2%, with 7s. costs.

Defendant said he would pay the money under protest.

NO STAMP IN HIS POCKET.

IN the City of London Court on Monday, before Mr. Commissioner Kerr, Mr. Hy. W. L. Robinson, trading as W. E. Spencer & Co., chemical manufacturers, 68 North Street, Gore Wharf, Hackney, sought to recover the sum of 7% 10s., the balance of 30% alleged to be due for chemicals supplied to the Anthrod Compound Company (Limited), of 63 Chancery Lane, E.C.

The question in dispute was whether or not the plaintiff agreed to allow 25 per cent. deduction. It was alleged that after the goods had been sold the business of the company was taken over by a Mr. Waller, who offered to pay the debts if the creditors would accept a 25-per-cent. deduction. A traveller in the employ of the plaintiff denied, on cross-examination, that he ever had an interview with Mr. Waller when he made this proposal.

Mr. Commissioner Kerr: Suppose he made a contract to take 25 per cent. off, what consideration was there for such a proceeding? How could he bind the plaintiff?

Mr. Elliott, counsel for the defendant, replied that the plaintiff would have received nothing for his account out of the old company, and Mr. Waller was willing to take over the business if he could get the trade-creditors to take a

reduction of 25 per cent. All of them did so, and the defendants' case now was that the plaintiff agreed as well.

Mr. Robinson: The plaintiff said he never made any arrangement to take off 25 per cent. It was true he accepted 22½ 10s., but that was on account.

Mr. Commissioner Kerr: Why did the defendant not take a receipt in full discharge?

Mr. Elliott: Because neither party had a receipt-stamp in his pocket.

Mr. Commissioner Kerr: Good gracious! Neither of two business-men in this enlightened age having a penny stamp in his pocket!

Mr. Waller, the defendant, detailed an interview he had had with plaintiff's traveller when this offer was agreed to.

Mr. Commissioner Kerr said at present it was oath against oath. He would find for the plaintiffs for the amount claimed, but the defendants could have the case tried by a jury if they were so inclined.

CARRIAGE OF OIL OF PEPPERMINT.

ON Tuesday Mr. Commissioner Kerr disposed of a case in the City of London Court of some importance to the drug trade, in which the plaintiffs, Messrs. Charles Gross & Co., chemical merchants, 9 Mincing Lane, E.C., sought to recover 57 0s. 6d. from Messrs. H. J. Perlback & Co., shipping agents, 113 Fenchurch Street, E.C., for damage done to four casks of oil of peppermint, *ex* the ss. *Roland*, at Hamburg, which was alleged to be caused through the defendants not exercising reasonable care and trouble.

Mr. E. B. Tattershall, who appeared for the plaintiffs, said the defendants had exhibited a great want of diligence in conveying the oil of peppermint from Hamburg to London. On its arrival it was discovered that the oil of peppermint had been leaking on the voyage, with the result of a loss.

Mr. Commissioner Kerr: But are the defendants liable for leakage of casks on voyages? I don't think so.

Mr. H. E. Farnfield, who appeared for the defendants, said they were protected from anything like liability by the bill of lading. There were several clauses exempting them under the circumstances mentioned.

Mr. Tattershall said the bill of lading could not exempt the defendants from having to pay for a want of reasonable care.

Mr. Commissioner Kerr: What do you call reasonable care? That is what it comes to.

Mr. Tattershall said the cases were properly packed, and, seeing the condition in which they arrived, there must have been want of care or want of skill to have caused the damage. That was the only way in which it could have happened.

Mr. Commissioner Kerr: You must go a little further than that.

Mr. Tattershall said the defendants in one of their letters had asserted that the damage arose owing to the cases not having been properly soldered, but he was in a position to show that there was no ground for the suggestion.

Mr. Commissioner Kerr feared he was too much accustomed to these cases not to be quite sure about the point. He thought shipowners and agents had exempted themselves from liability for simply everything in the present day that might happen. Merchants could not recover for scarcely anything which was damaged while on the sea. The only chance they had was to show that the captain and the crew danced a hornpipe on the cases of oil of peppermint. (Laughter.) Nothing short of that would enable the plaintiffs to recover.

Mr. Farnfield said in this case even that would not do, because under the bill of lading "the captain, officers, and crew of the vessel in the transmission of the goods as between the shipper, owner, or consignee thereof and the ship or shipowners will be considered as the servants of such ship, owner, or consignee." The plaintiffs in this case were the consignees, so that the defendants were really plaintiffs' agents. Instead of the defendants being liable to the plaintiffs it was the reverse.

Mr. Commissioner Kerr laughed heartily, and said it was so. By-and-by, shipowners would stipulate that if any damage was sustained the owners of the goods, whether oil

of peppermint or otherwise, would have to pay the ship-owners. That was what it was coming to.

Mr. Tattershall: Very likely, sir.

Mr. Farnfield: At present all we suggest is that the plaintiffs shall pay us for coming here.

Mr. Tattershall: I hope they will be more merciful to us over the costs than they have been over our oil of peppermint.

Mr. Commissioner Kerr said he had no alternative but to enter judgment for the defendants, with costs.

LINCOLNSHIRE SHOPKEEPERS AND THEIR TINCTURE OF RHUBARB.

In the report of two cases at Spalding, which we published last week, the fines imposed were stated to be 5*l.* and 10*l.* respectively. They should have been stated at 5*s.* and 10*s.*

Foreign and Colonial News.

AUSTRIAN QUICKSILVER.—The Austrian quicksilver-mices produced 570,200 kilos. quicksilver in 1891, against 541,600 kilos. in 1890. The number of hands engaged in the industry is 1,116.

EXPLOSION IN A COMO PHARMACY.—In Guffoni's pharmacy, at Como, Italy, an oxygen-apparatus has exploded. The pharmacist and a medical man, Dr. Cantoni, were killed on the spot, while two other persons suffered severe injuries.

DISINFECTANTS IN AUSTRIA.—Stirred up by the fear of visitation by cholera, the Austrian provincial Parliaments are voting considerable sums for the purchase of disinfectants and the taking of preventive measures. The Landtag of Lower Austria, for instance, has voted 15,000 florins, that of Upper Austria 3,000 florins, of Salzburg 1,000, of Moravia 2,000, and of Silesia 2,000 florins.

POISONING BY LYSOL.—The Criminal Court of Bremen, Germany, has sentenced to fourteen days' imprisonment a druggist's assistant who had dispensed, by mistake, pure lysol instead of a 1-per-cent. solution of the drug, which was prescribed for outward application for a child suffering from burns. The pure lysol penetrated the skin and caused acute poisoning, from which the patient died.

NITRATE OF POTASH AND PLUMBAGO IN MASHONALAND.—The British South Africa Company has received a report from Mr. Griffiths, mining engineer of the De Beers Syndicate, stating that he has made a valuable discovery of nitrates near Mount Darwin, in the direction of the Hunyani River. The deposit, which consists of pure nitrate of potassium, lies in beds varying in thickness from 3 feet to 20 feet, and extending over an area of some twenty miles. He has also discovered a rich bed of plumbago in the same neighbourhood. This latter lies in the alluvium, but is very pure, and he says there is a sufficient quantity to be worked for fifty years.

PROJECTED SULPHURIC-ACID SYNDICATE IN GERMANY.—Negotiations have been in progress for some time to unite the whole of the sulphuric acid manufacturers in Germany into a syndicate to regulate the production and the price of the acid. It seems that the object of these negotiations has now been all but satisfactorily accomplished, and that an agreement between the manufacturers is on the point of being signed. It is not intended to raise the price of sulphuric acid excessively, but care will be taken to restrict the production to the actual requirements, and each factory is to have a certain district assigned to it where the sale of its produce will not be interfered with by other members of the Union.

DERMATOLOGISTS AT THE HUNYADI-JANOS WORKS.—The international congress of dermatologists which lately met at Vienna closed its meetings with an excursion to Budapest, at which the principal places of interest in and around the Hungarian capital were visited. In the course of their sight-seeing the party were conveyed by special train to the Hunyadi-János springs and shown over the establishment

by one of the proprietors, Mr. Audor Saxlehner. The practical character of the installation and the magnitude of the works provoked enthusiastic encomiums on the part of Mr. Saxlehner's guests. The visitors were afterwards entertained at luncheon by Mr. Saxlehner. Mr. Jonathan Hutchinson (London), Dr. Allan Jamieson (Edinburgh), Dr. Hardy (Paris), and Dr. de Amicis (Naples) were of the party.

MURDER AND SUICIDE OF HUNGARIAN PHARMACISTS.—What may be the cause of the fearful prevalence of suicide among pharmacists in the Hungarian provinces of Austria? Over-competition and poor pay have something to do with it, no doubt, but they can hardly be responsible for all, or even most, of the instances. Last week our Austrian exchanges mention only two cases, which is a rather scanty budget, but often there are many more recorded. Laboratory-assistant Joseph Cseh, engaged in Pillich's pharmacy in Budapest, took morphia at the close of his day's work, and died within an hour. It was at first thought that his was a fatal case of cholera, and a considerable commotion was created in the city. Cseh did not live happily with his wife. About the same time Assistant D. Hazay, in Duna-Földvár, took a fatal dose of strychnine. No reason is assigned for this deed. From Gross Wardein, on the Danube, news came almost simultaneously that Assistant Franz Knorr, from Sarkad, was found murdered near the railway station.

CHLORODYNE IN CANADA.—The Ontario College of Pharmacy has succeeded in a prosecution against a Toronto limited company for the sale of chlorodyne and Boschee's German syrup, the former containing $2\frac{1}{2}$ grains of morphia in each ounce, the latter $\frac{1}{10}$ grain. They were not labelled "Poison." Referring to the syrup, the Magistrate said that the Act specified the salts and solutions of morphia. He presumed that a compound containing a very little morphia could hardly be called a solution, and the question arose whether one would be justified in labelling a very dilute solution as poison. He ultimately decided that the charge of selling poison without proper labelling and registration had been proved, and imposed a fine of \$20 and costs. A similar fine was imposed upon the company for keeping open shop for the sale of poisons, but the Magistrate objected to multiplying cases against the defendants, who had already been punished. However, observing the fact that an unqualified person (a girl) had handed over the poisons, he followed the English decision in regard to "the seller," and imposed the fine, giving leave to appeal.

PHARMACY PRICES IN GERMANY.—A standing heading in the German druggists' journals, which are always anxious to exhibit pharmacists as an unfairly privileged class, is the large increase in the value of chemists' shops. Thus we are told that the Apotheke at Langenloes, which was established twenty-five years ago, and was sold a few years later by its original owner for 1,500%, has now changed hands again for 250%. The Lion Pharmacy in Thorn, which was sold in 1879 for 6,000%, and resold in 1887 for 13,750%, has just changed hands for the third time for 15,750%. At Münsingen the apotheker has just disposed of his business, which cost him 5,000%, for 8,200%. It must be remembered that under the system of State concessions, which limits the number of pharmacies to one to every 10,000 of population, and in a country where doctors may not dispense, an apotheker in one of the small places here mentioned has a monopoly of the dispensing business in his district. Nevertheless, the prices now that—in Germany, at all events—the happy elect who are able to secure a "concession" are thereby given a long start on the road to fortune.

THE KIMBERLEY EXHIBITION.—From an account of the opening of the Kimberley Exhibition in the *Cape Argus*, we see that a good many British firms known to our readers are represented in the South African Diamantina. Among those to whom special reference is made are Sutton & Co., the seedsmen; Morris, Little & Co., the sheep-dip makers; J. A. Rose & Co., of lime-juice fame; Carter & Co., the seed-merchants; the Nicotine Excelsior sheep-dip; Idris & Co.'s mineral-waters; Edwards's desiccated soups; Root's coca coca; and F. C. Calvert & Co., of Manchester. Messrs. B. Fleming & Co., the oil-refiners, have left no stone unturned to bring their wares to the notice of the visitor. The Cape Town Soap Factory, of which the Hon. Mr. Graaff the proprietor, have the biggest soap show in the Exhibition. Their trophy weighs over 10 tons, and they also have

a fine exhibit of "berry wax" in all colours. This will be transported from Kimberley to Chicago. Colonial industry is represented by Mager & March, of Queenstown, who make a large display of druggists' goods; by Turner & Co., of Durban, Natal, who are exhibiting infants' food manufactured by the Cornilla Africana Manufacturing Co., and called the Cornilla Africana Food; and by eucalyptus oil and cordial manufactured by Y'Brad & Co., of Durban. This oil has recently been introduced into England. There are also some samples of an entirely new colonial industry, such as essence of beef, beef-tea jelly, and concentrated tea.

QUININE FOR THE MILLION IN INDIA.—The annual report of the Director of the Indian Government cinchona plantations states that in the year 1891-92 the crop collected amounted to 285,560 lbs. of dry bark, against 293,972 lbs. in the previous year, of which 80,430 lbs. were red bark, 114,540 Ledgeriana, 70,870 hybrid, 19,170, Verde and Morada, and 550 Officialis bark. In other words, the crop was composed of 205,130 lbs. of the quinine-yielding, and 80,430 lbs. of the febrifuge-yielding, barks. The whole of this crop, with the exception of a small quantity supplied on indent or sold to Government institutions, was made over to the febrifuge factory for disposal. The output of the factory was 4,586 lbs. of sulphate of quinine and 4,190 lbs. of febrifuge, against 4,010 and 4,031 lbs., respectively, in 1890-91. The entire quantity was manufactured by the fusel-oil process, which continues to work satisfactorily. The net profit on the working of the estate amounts to 7,962r. 12s. 8p., against 17,040r. 2s. in 1890-91. Under the orders of the Government of India, the sale price for locally manufactured quinine supplied to Government is to be the same as the rate in England of Messrs. Howards & Sons' quinine on January 1 each year, converted into Indian currency at the official rate of exchange. The price of the quinine supplied to Government officers and local authorities is, however, slightly higher than that charged to medical depôts, and the question is under consideration whether the former should not be placed in the same position as the latter.

DISPENSING-CHARGES IN ITALY.—The new Italian pharmacy law has established an official retail price-list for drugs which has just come into operation. The list gives the maximum figures which a pharmacist is allowed to charge for all the drugs mentioned in the Pharmacopœia, as well as for the dispensing of prescriptions. The maxima are said to be much higher than those fixed by the German and other continental Governments, and the Italian chemists rejoice accordingly. For the work of dispensing (exclusive of drugs or packing) the maximum charges allowed are as follow:—

	Charge for	37 oz.	3½ oz.	2½ drs.
Mixing powders and liquids	d.	d.	d.	d.
Cold solution of one or more ingredients	4	2	1	2
Do, hot	5	3	2	3
Simple emulsion	7	4	3	4
Oil emulsion	6	4	3	4
Maceration of one or more ingredients	10	5	3	4
Digestion of ditto	6	4	2	3
Infusion of ditto	10	5	2	3
Decoction of ditto	6	4	2	3
Filtration	8	5	—	—
Bruising	2	1	1	1
Powders, coarse	8	4	2½	3
„ fine	8	4	2	3
„ very fine	15	5	3	4
Preparation of pastilles	25	8	5	6
„ cold ointments	40	10	—	—
„ hot	20	6	3	4
„ syrups	30	8	4	5
„ spirituous tinctures	20	5	3	4
„ ethereal	40	20	10	10
Distillation of aqueous liquids	14	6	4	5
„ alcoholic	30	10	7	8
Preparation from aqueous extracts	—	7	3	4
„ alcoholic	—	100	60	60
Preparing pills (inclusive of mass)	s. d.	d.	d.	d.
„ „ and silvering	10	3	1	1
„ suppositories	1 3	4	1	1
	4 2	10	3	3

Making plasters—1 square decimetre, on leather, 2d.; on silk or linen, 1d.; from 1 to 10 square decimetres, on leather, 6½d.; on silk or linen, 3½d.; from 10 to 100 square decimetres, on leather, 2s. 2d.; on silk, 1s. 4½d.

"SANITAS" DISINFECTANTS & APPLIANCES

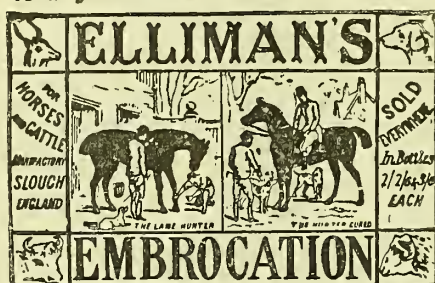
Illustrated Pamphlet Free on Application.

OUR LATEST NOVELTY IS
"SANITAS DISTEMPER,"

For WALLS, CEILINGS, &c.

THE SANITAS CO. (LIM.), BETHNAL GREEN, LONDON, E.
C. T. KINGZETT, F.I.C., F.C.S., Managing Director.

SHOW CARDS, 24×17 or 17×12,
to any address in the United Kingdom

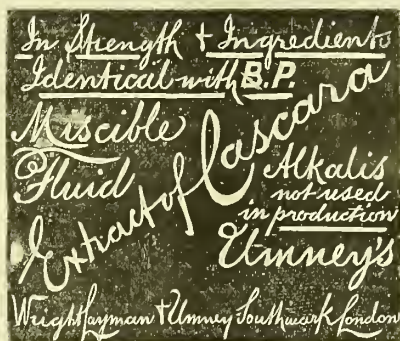


See first page, facing inside of front of cover, of first issue of this month, for latest particulars.

YOU CAN'T READ THIS WITHOUT YOUR SPECTACLES!

Day's Oil of the Night
Is an Embrocative Balm for the People, and a source of profit to the Retailer
1s. 1d. and 2s. 9d. NO CUTTING.

DAY & SONS, CREWE.



MUMFORD'S

(FARRINGTON ROAD, LONDON, E.C.)

THE BEST THAT CAN BE PRODUCED.

PURE CRUSHED LINSEED	{ 18/ }	1 cwt. carriage paid; or ✕ 7, 14 & 28 lbs. free on rail Lond.
PURE STARCH POWDER	{ 26/ }	1 cwt. carriage paid; or ✕ 7, 14 & 28 lbs. free on rail Lond.
PURE FULLER'S EARTH (Light Colour)	{ 16/ }	1 cwt. carriage paid; or ✕ 7, 14 & 28 lbs. free on rail Lond.
PURE FULLER'S EARTH	{ 14/ }	1 cwt. carriage paid; or ✕ 7, 14 & 28 lbs. free on rail Lond.

* CARRIAGE PAID *
To Railway Stations within the radius of 200 miles from London, and up to 2s. to Stations beyond, on 112 lbs. and upwards of above articles.

MOSS'S MISCIBLE CASCARA

Mixes with Water.
Certain and Pleasant.

Not Nauseous.

"A great improvement."

"A very elegant preparation of this drug."

"Superior to anything yet introduced."

—Extracts from Letters.

See the Medical and Pharmaceutical Press.

In 1-lb. and 5-lb. bottles, through any Wholesale House, or from the only makers—

JOHN MOSS & COMPANY,
Galen Works, New Cross Road, LONDON, S.E.

SCHWEPPE'S GOLD MEDAL TABLE WATERS

AS SUPPLIED TO THE QUEEN.

In Bottles and Patent Syphons.

51 BERNERS STREET, LONDON, W.

SOUTHALL'S ATTRACTIVE SPECIALITIES.

To bear Name and Address of Buyer.

NOVELTIES are Constantly being
Added to the Series.

Sample Cases containing Dummies, and full particulars
are sent for inspection to any registered Chemist in the
United Kingdom, Carriage Free both ways.

"OF EXCEPTIONAL MERIT AND ORIGINALITY."
The Chemist and Druggist.

SOUTHALL BROS. & BARCLAY, BIRMINGHAM

THE BEST TINCTURES, INFUSIONS AND SYRUPS ARE THOSE MADE WITH

Fletchers'
Concentrated Liquors

Editorial Comments.

WORK AT THE SOMERSET HOUSE
LABORATORY.

FROM the report by Dr. James Bell appended to the annual report lately issued by the Board of Inland Revenue, we gather some interesting facts concerning the work done at the great chemical laboratory under his direction at Somerset House. The report refers to the work of the year ending

March 31, 1892. In that period the total number of samples analysed by the Somerset House chemists amounted to 48,566, which is 130 more than in the previous year.

Tobacco and beer samples account for nearly 40,000 of these, and a large part of the rest of the work is the examination of goods bought by the Board of Trade, Admiralty, India, and other Government Departments.

The development of the export trade in spirituous medicines is very gratifying. The concession of drawback on this business was made in the latter part of 1888. In 1889 the samples examined numbered 1,759, in 1890 they increased to 2,947, and in 1891 to 3,819.

The laboratory chemists are now engaged in repeating their investigations into the character of the milk now generally produced, in order to ascertain whether any material changes have taken place since their previous enquiry ten years ago into its composition which would affect the standards of quality hitherto relied on as a guide in dealing with samples suspected to have been tampered with. This work has been undertaken in view of their position as referees under the Sale of Food and Drugs Acts.

By microscopical investigation two extensive frauds on the Revenue, by evasions of the duty on coffee mixtures, were detected during the year. Mixtures of coffee and chicory believed to contain a large proportion of caramel, were being sold in the north of England without payment of the packet duty. The samples purchased did not confirm the statement as to the use of caramel, but several were found to contain an admixture of ground and roasted cocoa husks. Investigation led to the seizure of over 20 tons of chicory mixed with ground cocoa husks on the premises of two manufacturers. The mixed chicory was subsequently restored on the payment of penalties amounting to 500%, and on the manufacturers undertaking to put the same into packets bearing a proper duty label.

The samples referred to the Laboratory by magistrates under the Sale of Food and Drugs Acts numbered forty-five, and comprised butter, butter-milk, coffee, dandelion-coffee, lard, linseed-meal, milk, mustard, whisky, white pepper, and rum. In seven samples of milk, two of butter, and one of whisky the Laboratory chemists did not agree with the analysts' reports.

An important series of experiments on disinfectants undertaken for the Board of Trade is mentioned. The object was to fix a standard of efficiency for disinfectants intended to be used on board passenger and merchant-ships, and to revise the list of disinfectants in the medical scales of the Board of Trade. It was decided to adopt as standards a solution containing 80 per cent. of carbolic acid, and a powder containing 20 per cent. of carbolic acid. Every disinfectant on the Board of Trade list was examined bacteriologically, in order to determine whether it was equal in value to the standard as an antiseptic and disinfectant. The experiments extended over several months, the result being that nearly every liquid disinfectant on the list was found to be inferior to an equal bulk of the carbolic-acid solution, and in the case of powders to an equal weight of the carbolic-acid powder. Revised medical scales have now been issued by the Board of Trade embodying the recommendations of this committee.

Contractors still seem to hope against hope for the old days when they could plant inferior goods on Government Departments. To the Admiralty somebody supplied pills which were found not to correspond to the formula of the B.P. Some linseed oil supplied to the Home Office was found to be largely adulterated with resin oil, and some white lead contained 21 per cent. of barium sulphate; while out of 539 general samples submitted to the laboratory by the India Office, 111 were either not genuine, or so inferior

in quality that they could not be approved. Among the articles were rape oil adulterated with mineral oil, pearl barley faced with chalk, white lead mixed with barium sulphate, zinc white adulterated with white lead, and lamp-black containing a large excess of mineral matter; but the most glaring case of non-compliance with the terms of the specification were two samples of brass tubing, the lining of which, though submitted as being pure tin, contained 52 and 59 per cent. respectively of lead, and two samples of verdigris which were adulterated with 40 per cent. of sodium sulphate and 25 per cent. of cupric sulphate respectively. The chemists have to resist attempts of an opposite character by the methylators, who aim to get naphtha passed as pure as possible, the revenue authorities insisting on a high standard of impurity. Attempts to obtain approval for such naphtha during the past year have been exceptionally numerous, and have resulted in a large number of the samples being rejected.

Dr. Bell mentions the change made during the year in the character of methylated spirits allowed to be sold by retail. In order to prevent the use of such spirit as a beverage, the Board decided, at his suggestion, that while methylated spirit for general use in the arts and manufactures should be still allowed as hitherto, that portion sold by retail to the general public should contain a small addition of petroleum. This admixture renders the methylated spirit turbid when diluted, and also more offensive in character. The retail sales since its introduction have largely fallen off, and there is every reason to believe that the practice of using such spirit for drinking purposes has been extensively abandoned, if not altogether stamped out. By the course adopted it is further stated a more effective control can now be exercised over the uses to which the spirit is applied.

From the requests made to the Board for the use of ordinary methylated spirit, it has been evident in some cases that the applicants had hitherto been making an improper use of such spirit.

WANTED: A SCIENCE REFORM.

WE have always thought the Royal Society a harmless though dignified body. It is so far above the mass of scientific mankind that they can afford to admire it from afar, and leave the extremely ambitious and abnormally clever few to struggle through its narrow portals. Nothing but the very richest cream is served with its afternoon tea, its records are centuries old, and its councillors the most gifted of men. Such a rare old institution is something for a nation to be proud of. But here comes a reformer—yclept "A Free Lance"—having neither respect of persons nor honour of days, who talks flippantly, if cogently, of remodelling the Society's functions. A very bold anonymous person he must be; but there is some sense in his pamphlet on "The Organisation of Science." Science, British science, according to him, is wholesale robbery from beginning to end; this society steals the food of that; this journal poaches on the preserves of that; there is need of a well-organised detective force to stop pilfering and to recover the stolen property, and on the principle of setting a thief to catch a thief our "free lance" nominates the Royal Society to the part of the Howard Vincent of science. We may lose nothing at this beginning of our own science session by considering what he says.

First, then, the argument. Two hundred and thirty years ago the Royal Society was founded, and, as the sole representative of science, everything was gathered into its net, and men knew where to look for all that was new. As science grew the Royal net was found to be inadequate, and other

smaller nets, in the shape of the Linnean, the Chemical, the Geological, and many other societies were formed. Each was instituted for the purpose of monopolising a special branch of knowledge; but, knowledge having no boundary, and being subject, like other things, to differentiation, society-making has not stopped there, and we have the spectacle of such a society as the Linnean having its vitals sucked by the Zoological, the Entomological, the Microscopical, and dozens of similar societies and field-clubs throughout the provinces. Meanwhile, the Royal and the Linnean pursue their old courses. We have said that the Royal is a robber—the argument rather shows that it is the robber; but that is where our pamphleteer's superior logic gets the better of us. He argues that when the Linnean Society was founded the Royal should have ceased to receive papers on biological subjects; when the Chemical was founded no more dissertations on chemistry should have gone to the mother of the societies; and so with all the rest. And to the extent that the Royal Society receives papers of any kind, it is eating the food of its offspring.

This savours of madness, but whatever "Free Lance's" argument may be, his objects are business-like, and they are, first, to bind the multitude of societies together, and, second, to reduce the number and systematise the nature of society publications. As science is so well looked after by specialised bodies, the Royal Society could now afford to give up its ancient functions and, with its ample resources, undertake the organisation of the work of its offspring. As to the work of union, there should be common centres for each department of science. Taking the Society of Chemical Industry as the model, each of the old societies should have sections in the provinces wherever there are a sufficient number of members to form a section. This would, of course, mean the annihilation of local science clubs and societies; but there is nothing to regret in that, says our pamphleteer—he is a Londoner, and knows not that "our local science club" is always second only to the Royal. But it is the journalism of science that is most at fault. This is how "Free Lance" puts it:—

If we examine the organisation of even the most happily circumstanced branch of science, we shall arrive at this dolorous result, that researches and papers relating to it may be published, not only in their sole proper place—viz, the journal of the specialist society concerned in such studies—not only, also, in the Royal Society's journals, but perhaps in the journals of the Royal Society of Edinburgh, or the Royal Society of Dublin, the Philosophical Society of Manchester, the Philosophical Society of Glasgow, the Philosophical Society of Cambridge, and several other such bodies. Is not this state of affairs—this shocking disunity and disorganisation—as lamentable as it is disgraceful? How, in the name of common sense—the bewildered reader may well cry—can any worker possibly hope to keep in touch with all the latest results of his own special science if the work is distributed over a dozen different journals, the majority of which are nine-tenths full of matters that neither interest nor concern him, a tenth only being of importance to his studies?

The remedy is that each local society should cease to publish its proceedings; that the British Association and others of that ilk should follow suit; and that each central specialised society should select and publish papers of importance, no matter where they have been read. This sounds like a chapter from "Looking Backward," and impracticable because it is not made a penal offence to disturb the simple simplicity of the scheme. So far no harm has been done by the multiplicity of societies; they serve to bring men together, the best of whom allow their best work to gravitate to the metropolitan centre, whence its existence becomes known to all who are interested. The multiplicity

of publications is about equally serious, and it must be irritating to the busy men who spend their whole time in laborious research to hunt up references in dusty journals. But that inconvenience needs some nursing, for as a matter of fact there is generally one publication in each branch of knowledge which does the sifting work thoroughly, and is relied upon by those attached to the branch. Need we go further than THE CHEMIST AND DRUGGIST for an illustration of that?

THE VIVISECTION DEBATE.

THE vivisection debate which enlivened the Church Congress at Folkestone last week was intense enough on both sides, but was curiously inconclusive. The real question at issue in the controversy never came into evidence throughout. The subject for debate was set down thus: "Do the interests of mankind require experiments on living animals, and, if so, up to what point are they justifiable?" The question in this form seems to an outsider one peculiarly capable of calm discussion. But there was nothing calm about those who took part in the debate. Dr. Samuel Wilks, who opened it, filled up most of his time with a tirade against the cruelties inflicted on animals by sportsmen and cooks—an argument which is obviously devoid of the smallest shadow of logic. Mr. Lawson Tait, who was expected to lead for the opponents of the practice, had turned out to be not eligible on the ground that he was not "a *bonâ fide* Churchman." The case for the anti-vivisectionists was therefore opened by Bishop Barry in a highly-coloured but, on the whole, an eloquent defence of humanitarian ideas as opposed to the claims which modern science puts forward. Mr. Victor Horsley, professor of pathology at University College, London, and well known as one of the most uncompromising advocates of the unrestricted freedom of medical men to do what may seem good in their eyes with the brute creation, followed the bishop. He made an impassioned speech, and no doubt secured the sympathy of the majority of his audience. He set himself to prove that Bishop Barry was ignorant, and culpably ignorant, and that Miss Cobbe's assertions were fraudulent, and her book on the subject one of the rankest impostures that had for many years defaced English literature. Mr. Lawson Tait, whose opposition to vivisection has been a serious stumbling-block to the experimenters for years, was declared to be the only man of professional position among medical men who opposed it, and he, though a surgeon of great dexterity, was ignorant of science and her requirements. Lastly, in order to expose the inconsistency of a vice-president of the opposing society, Mr. Horsley made public a consultation between himself and a patient, a proceeding which even his colleagues will scarcely defend. The cause of vivisection was more logically defended by M. Pasteur's herald, Dr. Armand Ruffer, who claimed that his hero had rendered services to humanity such as had perhaps never been rendered before by any one man. Mr. F. S. Arnold, of Manchester, and Dr. John H. Clarke, of Mayfair, ably maintained the controversy on the other side, the latter endeavouring to demonstrate that "medical opinion was never to be as much suspected as when it was unanimous." Weighty letters from Sir James Paget and Sir G. M. Humphry recorded the conviction of the writers that experiments on living animals are necessary to the progress of medical science.

Impartial listeners no doubt considered that the supporters of experiments on animals scored a rhetorical victory at Folkestone. But it cannot be said by any careful reader of the debate that they established by any fraction of proof what we understand to be their claim, that the Cruelty to

Animals Act should be repealed. They paraded effectively, but they scarcely met the question at issue. Within the past few years they have chosen three great battlefields, and have proclaimed conclusive victories in advance. They have little enough to say now about Koch's tuberculin, the famous Hyderabad Commission, which was to result in the future safety of the use of chloroform, has been followed by certainly no diminution of fatal accidents from the anæsthetic, and finally M. Pasteur's amazing theory of inoculation against hydrophobia after the bite, which is yet far from being conclusively established by results. In a letter published in Wednesday's *Times*, Mr. Lawson Tait touches the vital point of this discussion. He says:—

The vague statements made by Sir James Paget, Sir George Humphry, Sir Andrew Clark, and Dr. Samuel Wilks, that great advances in curative and preventive medicine have been made by experimentation on living animals are not enough for those who have, like myself, given a great deal of trouble to the critical investigation of such assertions. Uniformly they have been found quite destitute of historical foundation.

These gentlemen are very eminent members of my profession, and severally and collectively they have done much to advance its objects. I challenge them one and all to point out a single instance, in their own works, where they have adopted this method of research with any advantage.

Such assertions as they make must surely have some foundation in their own immediate experience, and cannot altogether depend upon information obtained from second-hand, and probably German, sources.

We await with interest the reply to this daring challenge, which we cannot doubt will be forthcoming.

COMMENTARY.

EXAMINERS' LATIN.—We notice four errors in the Latin quotations set for translation in the Irish Preliminary examination, which we publish this week. We shall be glad to receive postcards from students indicating these.

SELLERS OF MEDICINES SHOULD BE QUALIFIED.—The *Financial News*, in commenting on the *Seqnah* meeting which was reported last week, says:—"With a professed thought-reader concerned in the business one would have expected that *Seqnah* (Limited) might have foreseen the troubles which have overtaken the company in nearly every country where it introduced the system of selling medicines of unknown composition from itinerant waggons. We cannot agree with the chairman that it was 'a crying shame' for Parliament to put a stop to this traffic. The whole tendency of public opinion and legislation has long been to require that those who sell or dispense drugs should be qualified and responsible. No exception should be made in favour of a company making large profits out of the sale of bottles filled with unknown ingredients, merely because shareholders have put their money in a business which experience has taught us should be subject to direct and reasonable control."

SHIPS' MEDICINE-CHESTS.—Under the new scale for merchant ships which has recently come into force we notice that carbolic acid and Crimson Fluid are the only disinfectants specifically named. Formerly in the case of carbolic acid it was stated that it should contain 80 per cent. of carbolic and cresylic acids and their homologues; now the homologues are dropped out, and to further show their respect for efficient disinfection the Board of Trade state that "samples of the disinfectants supplied will be occasionally taken for analysis, to determine whether they fulfil the requirements of the Board." Jeyes' purifier, sanitas oil, Tuson's disinfectant, Fletcher's pino-phenol, Baird & Co.'s

neosote, Garroway & Co.'s disinfectant, Penny's disinfectant, and Burnett's fluid are now omitted from the scale, but it is probable that these and other disinfectants may be included in the term "other disinfectants of approved quality." We take it, therefore, that any disinfectant other than carbolic acid for merchant ships must be specially approved by the Board of Trade if it is to take the place of carbolic acid. The action of the Board appears to be due to a desire to purge the scale of the names of firms, for the name "Condy" also no longer appears before "Crimson Fluid." Apart from this the chemical advisers of the Board have had something to do with the matter. The Board still adheres to the British Pharmacopœia, 1837. It would be better if they now recognised the 1885 edition.

REVIEWS

The Hand-camera and How to Use it. By Walter D. Welford. London: Iliffe & Son. 1s.

CONTAINS 153 pages of text; rather garrulous; a dozen specimen hand-camera photographs, themselves worth the cost. The book is not written for the novice who wants to buy a hand-camera or has just bought one, and to whom we should have expected it would have been of most use, but is "written for photographers, who, whilst they may be novices at hand-camera work, are certainly no novices in the art generally." To such it may be amusing, but it can hardly be of service. A carefully-written guide to buyers of hand-cameras is wanted, but this one does not meet the requirement.

A.B.C. Medical Diary and Visiting-list, for, 1893. London, 1892: Burroughs, Wellcome & Co. 2s. 6d.

THIS "Diary" is similar in size and style to those previously published by the firm. It contains space for recording visits to either 56 or 112 patients, pages for cash accounts, obstetric and vaccination engagements, engagements under Factory Act, memoranda, &c. With this is bound, on thin toned paper, the "Excerpta Therapeutica." This is a valuable section of the book for the busy practitioner, as it contains an exceedingly succinct record of recent advances in therapeutics, and such particulars in regard to posology and treatment as may be of material assistance to him in prescribing. From the pharmaceutical point of view, we look at the "Diary" as one which chemists may sell or present to their medical friends, according to the relations existing between them.

SCIENTIFIC MYSTERIES.

CHEMISTS are advised to stock and show this book in anticipation of the winter evenings. It contains particulars of 200 chemical and other experiments, is freely illustrated, and is the cheapest, most comprehensive, and most clearly described collection of experiments and illusions ever offered to the public.

It sells at 1s., and we supply it in one-dozen parcels with show card for 8s. 6d. It may be obtained at the same price from the following firms—

Ayrton & Saunders, 149 Duke Street, Liverpool
Barclay & Sons (Limited), 95 Farringdon Street, E.C.
Edwards, Wm., & Son, 157 Queen Victoria Street, E.C.
Evans, Lescher & Webb, 60 Bartholomew Close, E.C.
Evans, Sons & Co., 56 Hanover Street, Liverpool
Ismay, John, & Sons, Newcastle-on-Tyne
Maw, S., Son & Thompson, Aldersgate Street, E.C.
May, Roberts & Co., 9 Clerkenwell Road, E.C.
Newbery, F., & Sons, King Edward Street, E.C.
Thompson, John, Hanover Street, Liverpool
Woolley, James, Sons & Co., Manchester
Wyleys & Co. (Limited), Coventry

The advantage of stocking and selling this book is that it encourages and develops a new and profitable business in chemicals and chemical apparatus.

"SCIENTIFIC MYSTERIES."

OUR antipodean colleague, *The Chemist and Druggist of Australasia*, had the happy thought of offering a prize for the best outline of a lecture by a chemist to illustrate "Scientific Mysteries," and to induce the public to buy the book, the chemicals, and the apparatus, the sale of which it was published to promote. The prize was awarded to Mr. J. H. Niemann, Warracknabeal, Victoria, and his lecture, which was entitled "Colour and Chemistry," is published in full in the August number of the journal named. We reproduce it in a somewhat abbreviated form.

"Chemistry," says the author, "is such a very wide subject, that one cannot do more than treat one branch of it in a single address. I have chosen to treat in a general way some of the parts that *colour* bears in chemistry. This jar (*vide p. 1 Sc. My.*) contains different liquids mixed up in such a manner that their condition is indicative of chaos. On allowing it to stand for a little while, you see order gradually evolved. The chaotic fluid resolves itself into four different liquids, distinguished by their different colours. The ancients believed that the world consisted of four elements—earth, air, fire, and water. We know now, however, that each of these is actually composed of a number of different elements. The earth contains over sixty. Water and air also contain a large number—three in practically constant proportions, and a number of others, varying in quantity according to circumstances; while fire is merely the outward and visible sign of certain chemical actions with which we have at present nothing to do. The actual number of known elements amounts to sixty-six, and nature has made each one different in colour. Some resemble each other very closely, but there is a difference, apparent on examination, which becomes more strongly marked when seen through the spectroscope, or when each is brought into chemical combination with other elements. This paper (*vide p. 50 Sc. My.*) has been soaked in a solution of saltpetre and strontia. You see it imparts a rich crimson tint to the flame. This other has been soaked in saltpetre alone, and gives a violet tint. In the first example shown the violet of the saltpetre was obscured by the crimson of the strontia. The spectroscope would separate both colours and enable them to be distinguished, even in the first experiment. The coloured fires (*vide p. 97 Sc. My.*) sometimes used in theatrical performances, &c., are other instances of flames coloured by different chemicals. As the smoke from them is not very agreeable, we will content ourselves with one sample only—a green fire. The green is produced by, and is evidence of the presence of, nitrate of barium, or some other salt of that metal. It is possible to detect a number of chemicals in one flame by means of this little boiler (*vide p. 75 Sc. My.*), which contains spirits of wine and four chemicals—nitrates of copper, strontia, and barium, and chloride of copper. On boiling the spirit and turning on the tap, the steam may be ignited (in this way). The four colours seen—green, red, yellow, and blue—are due to the presence of the four chemicals previously mentioned. Sulphur when burnt in the air gives (as you see) a scarcely visible flame, but when burnt in oxygen it yields a flame of a bright blue colour, as we will proceed to demonstrate (*vide p. 7 Sc. My.*). This leads to the production of and some comments on oxygen. We have seen the effect of oxygen in giving brilliancy to burning sulphur, and you will now see that the effect of burning phosphorus in the gas is quite dazzling. The reason is that oxygen has a powerful affinity for other elements, and the process of chemical combination is frequently a violent one, causing, in the experiments shown, both light and heat. Parents will recognise a resemblance between oxygen and their boys and girls, since they have a powerful affinity for certain of the opposite sex, and when brought together they frequently 'go off.'

"The next illustration over which we will spend a moment is designed to show the effect of a certain gas in *destroying* colour. In this bottle (*vide p. 21, Sc. My.*) we have some oxide of manganese. When we pour on this chemical some hydrochloric acid (commonly known as 'spirits of salts') and gently heat it (in this way), chlorine gas is liberated and collects in the smaller bottle. This gas has a strong affinity for, and will remove hydrogen from anything containing it with which the chlorine is brought in contact, changing the

colours at the same time, even as hydrochloric acid will change the colour of your black suit to red, if you should happen to spill some on your clothes. The gas is very poisonous, but is easily mixed with water (in this way), when its properties may be studied with safety. If this chlorine water is placed in a plate and covered with a bell-glass, a coloured flower placed under the cover will shortly begin to lose its colour, and will, after a while, become quite bleached. A quicker way of showing its action is to put some into this wine and ink. The colour, you see, is speedily discharged. We have here in one glass a little hydrochloric acid (*vide p. 56, Sc. My.*), and in the other some ammonia. Each gives off a little visible gas, but when the two glasses are brought together they are filled with a thick smoke, the invisible chlorine and ammonia combining to form chloride of ammonium. By the way, it has been ascertained that Italian air contains more chloride of ammonium than that of any other country, and Italy is said to owe its large percentage of singers to the effect of this chemical on the voice; an apparatus is, in fact, sold for inhaling it. Local amateurs might take the hint. A neat little bit of parlour-magic may be done with glasses charged in this way. Hold them apart, blow the smoke of a cigar between the two, bring the glasses together, pretending to catch the smoke, cover them with a handkerchief, and command the smoke to multiply, which it will do in true conjurer fashion.

"We now come to a different series of experiments. The first we will take is as effective as the last, from the parlour-conjurer's point of view, and is as easily performed. Red iodide of mercury is rubbed on a piece of paper with a cork (*vide p. 46, Sc. My.*), and the paper is then held over a lamp until the red colour disappears. Now, if anyone will call out a word I will write it on the apparently blank paper in blood-red characters with a piece of wood, or anything else handy. The explanation is that heating the chemical melts and flattens its crystals, and when their shape is altered their colour is altered also—a good illustration of the fact that the colour of any article is not one of its inherent qualities, but is dependent entirely on its ability to absorb certain rays of light, and to reflect others. When the crystals are touched, they are restored to their original shape and colour. I remember startling a worthy old gentleman who handed me a coin to write with when I was performing this trick in public. I mentioned that the colour of the writing done with the coin would reveal its previous history, and then when the red writing appeared, I proclaimed that the money had been received in payment for blood. He was starting to explain how it came into his possession when I exposed the secret and the joke. The effect of heat on colour is made use of in magic inks. This paper (*vide p. 35, Sc. My.*) has been written on with weak sulphuric acid. The writing is invisible; but on holding it over the lamp the characters appear in black. The paper is charred, the corrosive action of the acid being developed by the heat. A more effective ink for invisible correspondence is a solution of chloride of cobalt (*vide p. 35, Sc. My.*). The writing done with this fluid is also invisible until heat is applied, when, as you see, it appears in blue, to disappear again, however, if it is simply breathed on. An application of the colour-changing property of cobalt is to be found in window-panes painted with a solution of the chemical, or fabrics dyed with it; as in the case of this specimen (*vide p. 85, Sc. My.*). In dry weather the material is of a blue tint, but when the atmosphere becomes damp it acquires a pink colour, a very neat barometer being thus formed. A fine spray of water on this specimen will show you how it acts.

"If you are handy with your paint-brush you may produce some startling effects by sketching a landscape with solution of bromide of copper (*vide p. 37 Sc. My.*), when you will have a representation of a winter scene (as you see). On heating it, however, it is miraculously transformed into a picture of spring, because the trees and grass were afterwards painted over with muriate of cobalt, which turns green when heated, and the sky and water with acetate of cobalt, which turns blue. A picture even more interesting, I think, is this engraving of Dæmings (*vide p. 36 Sc. My.*). This wretched criminal was never known to blush during his lifetime, but his spirit is cast in a different mould. When I point the finger of scorn at this portrait of him (wherein his spirit resides), you see he blushes violently, realising, no doubt, what a vile creature he is alongside such a superior

being as myself. I may as well explain at once, lest you should think there is really something uncanny about the portrait, that its cheeks have been painted with a solution of a chemical bearing the unpretentious name of phenolphthalein—a chemical which possesses the property of turning crimson in the presence of ammonia, some of which I had on my finger. You will observe that the blush disappears when the finger (and ammonia) is withdrawn. I have heard of an itinerant quack who created a sensation by utilising these chemicals. He held forth somewhat after this fashion:—‘Ladies and Gentlemen,—You see here some poverty-stricken blood [an almost colourless solution of phenolphthalein] taken from the veins of a man supposed by the doctors to be dying, but now happily restored to health by my great rejuvenator. The doctors said that his blood had become so poor that he could not live; but they didn’t know I was about. When I pour a few drops of my rejuvenator [ammonia] into this worn-out stuff, you see it instantly transformed into fine rich blood. That is the way it acted on Mr. Jones, and that is the way it will act on you. Five shillings a bottle, please.’ And he sold dozens.

“The next experiment I have to show you is a conjuring trick, introduced by the great Heller, and is somewhat similar in principle to the last. The chemicals he used were different, but the phenol and ammonia might have been used with equal success. On these cards (*vide* p. 43 *Sc. My.*) we have a number of ladies’ names; one of the audience will please select one and retain it. Now, if someone will step on the platform, I will reproduce on his arm, without touching it, the name on the card. Of course, a few passes must be made in front of it, and the aid of a few magic words invoked. Now, you see, the name has appeared on the arm, and you can see that it is the same as the one on the card. You will be partly prepared for the explanation, which is simple. The cards all had the *same* name written on them. That name was painted on the arm beforehand with tincture of iron, which became invisible on drying. In my hand I held a little indiarubber ball containing a solution of sulphocyanide of potassium, which I sprayed on the iron, producing the blood-red writing on the arm. A trick with the spray may be performed by anyone as follows (*vide* p. 64 *Sc. My.*):—Sprinkle over a dry white rose some fine aniline dye (red by preference), then shake off the bulk of it. What is left will not be noticeable. Then spray some water on the flower, and it will be transformed into a coloured one, a very small speck of the dye being sufficient to colour a quantity of the liquid.

“To show the effects of colour in analytical work the following experiment may be performed:—We have here (*vide* p. 39 *Sc. My.*) some solution of prussiate of potash. A little poured into this—solution of sulphate of iron—turns it blue; poured into solution of nitrate of bismuth, the latter turns yellow; while solution of sulphate of copper turns brown. Again, look at the results of the mixture of the contents of these five test-tubes (*vide* p. 38 *Sc. My.*). The first one, a colourless solution of iodide of potash, is poured into a solution of bichloride of mercury, also colourless. The result is the production of a scarlet colour, owing to the formation of iodide of mercury. The third tube contains a *strong* solution of iodide of potash, which possesses the property of re-dissolving the iodide of mercury. When this clear fluid is added to the contents of the fourth tube, which contains oxalate of ammonium, a white chemical is formed, which is turned black as it comes in contact with the sulphide of ammonium in the fifth tube.

“Now take a sheet of paper (*vide* p. 35 *Sc. My.*), and write on it with some solution of sulphate of iron, a practically colourless solution, representing the river-water impregnated with iron. Now, if the writing is sponged over with this solution of tannin, it turns black at once, real ink being formed. We will presently see how this combination is utilised by conjurers; but while we are treating of inks I will show you how to produce a blue ink in the same way, with two colourless solutions. On this paper (*vide* p. 36 *Sc. My.*) I will write down any suggested word with the solution of iron. After drying it I spray on it a little solution of ferrocyanide of potash. The result, you see, is to produce visible blue letters from invisible ones, a new chemical being formed by the combination of the other two, which is distinguished by a blue precipitate, as the tannate

of iron is by a black. Now for the promised conjurer’s trick (*vide* p. 49 *Sc. My.*). We have here two bottles filled respectively with ink and water, and we desire to make them change places. They must be covered with handkerchiefs, and the conjurer’s wand brought into play. Watch me closely. We will put in the corks so that nothing can possibly be introduced into the bottles. The magic having worked sufficiently, I lift the handkerchief covering the ink, and we see that the ink is changed to water, with fish swimming in it to show that it is the genuine article. On lifting the other handkerchief we find that the opposite change has taken place—the water being changed to ink. The ink is produced, as you may guess, by having a little bottle of iron concealed in the cork and emptying it into the water, in which some tannin had been previously dissolved. Real ink might have been used for the other bottle and made colourless with oxalic acid, or another chemical, but we could not then have displayed the fish; the bottle, therefore, was lined with black silk, which was withdrawn with the handkerchief.

“Everyone is familiar with the use that is made of blue in the laundry, but not everyone stops to think of the reason why it is used. This bottle (*vide* p. 36 *Sc. My.*) contains indigo dissolved in dilute sulphuric acid and mixed with some carbonate of potash. Observe the effect it has on these fabrics. The white cloth becomes blue, the red changes to violet, and the yellow to green. The blue indigo dissolved in the manner indicated acts on the colours of the fabrics as you have seen, one colour blending with another to produce a third. Time is nearly up, but you may have patience enough to give your attention to another trick sometimes performed by conjurers, and based also on chemical colour changes—I mean the pouring of a number of different fluids from one bottle (*vide* p. 46 *Sc. My.*). We will fill this bottle up with pure rain-water. Now we will fill up the glasses, putting something different into each. The first is port wine, then comes sherry, then claret; now we have milk, now champagne, and ink. Into the last glass we pour water to show that there is no deception about this magic bottle. The magic was performed by a little iron I had previously put in the bottle, and by small quantities of different chemicals put in the glasses, the iron acting on these developing the various colours. The last illustration I will bring under your notice will be connected with photography, perhaps the most important application of chemical colour changes. This photo of a leaf (*vide* p. 82 *Sc. My.*) was taken after this fashion: A sheet of paper was brushed over, by candle-light, with a solution of citrate of iron and prussiate of potash, then the leaf was laid on the prepared paper, covered with glass, and exposed to sunlight. The action of the light darkened the parts of the paper exposed to it, and produced the impression.

“I have attempted to show you, in the course of this lecture, how colour and chemistry work together. I might have adduced more striking facts, perhaps, than those chosen, or have selected more striking experiments, but I have confined myself to illustrations which could not only be readily understood, but readily performed, by anyone having an inclination that way. With this object in view, too, I have selected experiments which may all be found in a cheap little book entitled ‘Scientific Mysteries,’ published by the proprietors of THE CHEMIST AND DRUGGIST. Besides those I have shown you, this book contains a thousand and one other experiments, each one interesting and instructive, easily performed, and capable of affording no end of entertainment. In conclusion, I beg to remind you that this is an age of advertising, and you will admit that there are few business men—certainly very few chemists—who could stand before you for an hour without advertising their goods in some way. I think, therefore, that I deserve great credit for not mentioning that I have these books on sale, and for not drawing your attention to the fact that my liver-pills are the best in the world—price, one shilling per box. Try—Excuse me, I was nearly forgetting myself then, and, for fear I should do so again, will thank you for your attention, and retire.”

FUCUS VESICULOSUS.—Dr. Urquhart, of the Perth Asylum states that he has recently treated a patient with liquid extract of fucus, and the first week the weight decreased, but afterwards it increased steadily.

TRADE-MARKS APPLIED FOR.

ANY person who has good grounds of objection to the registration of any of the following marks should at once communicate with Sir Reader Lack, Comptroller-General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

(From the "Trade Marks Journal," September 28, 1892.)

Device of dragon and ball; for veterinary preparations. By W. S. Robson, trading as Robson & Son, 19 Eastborough, Scarborough. 166,658.

"ST. WINTA'S OIL"; for medicinal preparations for human use. By W. Stead, 79 Peel Street, Tranmere, Cheshire. The essential particular is "St. Winta's." 166,447.

Device of shield, scarf, and buckle; for aerated and mineral waters. By J. H. Drayton, trading as H. J. Roydant & Co., 75 Acre Lane, Brixton. 166,128.

Device of life-buoy floating on water; for mineral and aerated waters. By the Johannis Company (Limited), 25 Regent Street, London. 166,419.

"D. W. G." on diamond-shaped design; for all kinds of toilet-soap. By D. & W. Gibbs, City Soapworks, Finsbury, E.C. 164,206.

"ZOÉLIA," and wording on square label; for a toilet preparation for curling hair. By N. H. Backhouse, trading as Roberts & Co., 76 New Bond Street, London. 165,464.

(From the "Trade Marks Journal," October 5, 1892.)

Device of four lilies, and the word "PURITAS"; for a disinfectant in solid cones, crystals, powder, and fluid. By J. Adams and M. Adams, trading as the Puritas Company, 151 Brooke Road, Clapton, London. The essential particular is the device. 156,501.

Device of shield, with outstretched wings above; for perfumery and toilet articles. By E. A. Uhlmann & Co., Plauen, Germany. 165,681.

Geometrical design composed of circle and half-circles; for perfumery and toilet articles. By W. & C. Dunlop, 46 Peckover Street, Bradford. 165,754.

(From the "Trade Marks Journal," October 12, 1892.)

Device of trotting race-horse, driver, and carriage; for chemical substances used for agricultural and veterinary purposes. By J. Wilson, Green Walk, Bermondsey. 163,887.

"SÉDATINE," and device of peacock, with wording, on oval label; for chemical substances used in medicine and pharmacy. By the Société Anonyme des Matières Colorantes, &c., 105 Rue Lafayette, Paris. The essential particular is the device. 166,651.

"QUINA DE MURRAY," sketch of a spider on label, and wording; for a quinine medicinal wine. By Sir James Murray & Son, Graham's Court, Temple Street, Dublin. The essential particular is the device. 166,662.

"MOTHER SHIPTON AND TANDEM"; for perfumery and toilet articles. By Goodwin Bros., Ordsall Lane Soap Works, Manchester. 166,724, 166,725.

BANKRUPTCY REPORTS.

Re SAUNDERS & SAUNDERS, Westgate Works, Cleckheaton, Chemical Manufacturers.

A PETITION in bankruptcy was filed on October 5 on behalf of the debtors at Bradford. The liabilities are estimated to reach 30,000*l*. Application has been made for the appointment of a special manager to carry on the business pending the first meeting of creditors. It is expected that arrangements will in the meantime be made whereby the business may be carried on.

Re C. B. SPRAGGE NORTON, 78 Castle Street, Bristol, Chemist and Druggist.

At the Bristol Bankruptcy Court, on October 7, this bankrupt applied for his discharge. A similar application was made some time ago, when his Honour directed that the application be made again a year later. The Official Receiver said that the wife had died recently, and on inquiring into the affairs of her business he found that there was nothing which cast reflection on the debtor, and that he had withheld nothing from his creditors. The arrangement with the three persons which brought about the bankruptcy was a stupid one, because debtor entered into a matter about which he knew nothing. The debtor became insolvent four years ago, and there were allegations against him that he had failed before, and that he had contracted debts which he knew he could not pay. The Judge directed that the bankrupt receive his discharge in a month.

Re ROBERT MARKHAM JESSUP, Swinefleet, Goole, Chemist and Druggist.

A PETITION in the Wakefield Bankruptcy Court has been filed by Mr. Everatt, solicitor, on behalf of Robert Markham Jessup, lately carrying on the business of a chemist and druggist at Swinefleet, Goole. The gross liabilities are returned at 535*l*. 12*s*. 4*d*., there being a deficiency of 390*l*. 10*s*. 3*d*. The debtor attributes his failure to long illness caused by an accident, and being placed on the list of contributories to the Grimsby Abbey Walk Building Company (Limited).

Personalities.

MR. A. F. FRYER, B.Sc., has been appointed demonstrator in the chemical department of the Liverpool College in succession to Dr. W. H. Ince.

MR. W. LLOYD WILLIAMS, A.I.C., Phoenix Mills, Dartford, has been admitted a Fellow of the Institute of Chemistry on the recommendation of Messrs. Burroughs, Wellcome & Co. and Mr. John Moss.

MR. G. C. EWING, dispenser in charge of the stores at the Royal Naval Hospital, Stonehouse, having reached the age of 60, is about to be retired. The vacancy will probably be filled by the appointment of Mr. Gardiner, dispenser at Chatham Hospital, or of Mr. O. A. Reade, from Malta Hospital.

PROFESSOR CARL SCHMIDT, who has occupied the chair of chemistry at Dorpat University for forty-five years, has retired from that position. The Professor, who is now seventy, is the son of the late Apotheker Schmidt, of Mitau, in Russia. He was intended for a pharmaceutical career, but, after studying in Germany under Liebig and Wöhler, decided to devote himself exclusively to the pursuit of chemistry.

SIR BAGHVAT SINGH JAREJA, the Thakore Sahib of Ghoudal, recently obtained the degree of Bachelor of Medicine of the University of Edinburgh. He is the first of his class to take up medicine and obtain his degree. His subjects, it is said, propose to signalise the event by erecting a statue to their ruler in his capital in Ghoudal, in which the newly made medical prince will appear in the gown and hood of his degree, worn over his full native costume.

MR. E. H. SANITER, who has suddenly made a name for himself in metallurgy, is a young man under 30 years of age. He is a native of Redcar, was educated at the Coatham Grammar School, studied analytical chemistry in the laboratory of Mr. J. E. Stead, at Middlesbrough, and afterwards became assistant chemist to Mr. C. H. Ridsdale, at the North-Eastern Steelworks, Middlesbrough, whence he went to the works of the Wigan Coal & Iron Co., where he has developed and perfected his new process of desulphurisation.

MISS JESSIE HARRISON, of Pant, near Merthyr, whose father (now deceased) was formerly a chemist in business at Dowlais, has gained a scholarship at South Kensington School of Art, tenable for two years. Miss Harrison is the

first young lady from Wales who has had a scholarship of this class awarded her. A few months ago she was awarded the silver medal, the highest award for drawing from life, at the annual competition at South Kensington; and this year she has had two awards of prizes in the competitions for studies of drapery arrangements on the living model.

THE late Chief Inspector of Inland Revenue, Mr. John Molinex, C.B., was entertained at dinner at Wingrove's Royal Hotel, Purfleet, on Thursday of last week. Mr. Thos. Tyrer (who was chairman of the Chemical Section of the London Chamber of Commerce at the time of the concession of drawback on alcoholic medicinal preparations) presided. He eulogised the courtesy and ability of Mr. Molinex all through his conduct of the affair. He had known Mr. Molinex for nearly thirty years, and on his own behalf and for the representatives of the trade present he thanked him for the part he had taken in the matter. Among those present were Messrs. Arnold Baiss, R. H. Davies, G. B. Francis, W. H. Francis, Frank Clarke, Alfred Preston, John Moss, J. Gosnell, Holdsworth, Charles Umney, T. Donald Watson, F. J. Shaw, Kendrick B. Murray (secretary of the Chamber of Commerce), and Charles T. Tyrer. Expressions of regret at inability to be present were sent by Messrs. Farries, Hewlett, Dakin, F. H. Lescher, E. A. Webb, A. H. Mason, A. C. Wootton, and others.

Trade Notes.

MESSRS. PHILIP HARRIS & CO. (LIMITED), Birmingham, have published a neatly-bound and well-illustrated price-list of surgical instruments and appliances.

MR. JOHN MILNE, of Ladywell, S.E., has just issued a new price-list of the antiseptic surgical dressings manufactured at his factory, comprising such as those prepared for Sir Joseph Lister under his directions.

MR. H. SILVERLOCK, of 92 Blackfriars Road, has sent us samples of half-a-dozen varieties of almanacs and card-alendars for 1893, all produced in the excellent style for which his firm has so long been famous.

IN an advertisement, published this week, Messrs. Blyton, Staley & Co., of Manchester, bring prominently before the trade the fact that they accept no orders for their lozenges from other dealers than chemists. Such firms deserve the support of the trade.

THE Blackfriars Photographic & Sensitising Co., 1 Surrey Row, Blackfriars Road, have been appointed sole London agents for Messrs. Walter Griffiths & Co.'s detective, enlarging, and lantern-slide cameras. They intend to cater more for the lantern trade than they have done hitherto.

MESSRS. KNOLL & CO., of Ludwigshafen a/Rhein, have entrusted Mr. B. Kühn, 36 St. Mary-at-Hill, London, with the exclusive sale in Great Britain of their salol and the allied products, Messrs. R. Morrison & Co., of 2 Fen Court, London, continuing their agency for cocaine, lithia carbonate, and other preparations.

WE have received a rather entertaining and decidedly instructive pamphlet on "Lanoline," which consists of a *sumé* of the literature on lanoline, and a selection of formulae having it as a basis. It is unnecessary for us to refer to the pamphlet at length, as any chemist may obtain copy on asking Messrs. Burroughs, Wellcome & Co. for one. It is worth having. "From 'Oesypum' to 'Lanoline'" is the title.

MESSRS. W. B. FORDHAM & SONS (LIMITED), of York Road, King's Cross, have introduced some new and ornamental patterns of dishes of their patent unbreakable pulp-ware suitable



containing articles for chemists' counter or window display.

ANTIPIRYN AND THE TEETH.—An American dental journal is responsible for the statement that antipyrin weakens the teeth. The more imperfect the enamel the more effect antipyrin has upon it.

NEW COMPANIES

THE WESTERN INFIRMARY OF GLASGOW (INCORPORATED).—Registered in Scotland to extend the general hospital accommodation, provide the means of clinical instruction, take over, provide, maintain, or contribute to a convalescent home or homes, and to do all such lawful things as may be conducive to the attainment of the above and similar objects. Every member of the Association undertakes to contribute to the assets of the Association, in the event of its being wound up, to the extent of 1*l*, or in case of his liability becoming unlimited, such other amount as may be required, the word "Limited" being omitted from the title by licence of the Board of Trade.

NEW SULPHUR RECOVERY SYNDICATE (LIMITED).—Capital 10,000*l*, in 1*l* shares. Object: To acquire certain patents and inventions relating to an improved process for the recovery of sulphur, and the by-products arising therefrom, and apparatus therefor, and as dealers in aluminium, magnesium, &c. The first subscribers (who take five shares each) are:—F. A. Frieland, 11 Richmond Road, Barnsbury, N.; S. Willington, 28A Basinghall Street, E.C.; C. E. Jolly, 29 St. George's Road, N.W.; H. Russell, 74 Chancery Lane, E.C.; L. Kerr, 49 Grosvenor Road, Highbury New Park; C. H. Russell, 34 Chaplet Road, N.W.; and J. T. Shives, 337 High Holborn. Registered without special articles of association.

NORRIS'S MAGNETIC EMBROCATION (LIMITED).—Capital 20,000*l*, in 1*l* shares. Objects: To acquire the business carried on by N. H. Walker and the name of Norris's Magnetic Embrocation, with the recipe used in its manufacture, and to carry on business as manufacturers and vendors of and dealers in drugs and patent medicines, wholesale and retail chemists and druggists, &c. The first subscribers (who take one share each) are:—J. H. Wilkinson, Castle Manor, Southport, accountant; J. M. Martin, 18 Pembury Road, N.E., gentleman; R. Long, 2 Algernon Road, Birmingham, accountant; A. B. F. Burnett, Willesden Green, gentleman; T. Westwick, 23 St. Mary-at-Hill, E.C., merchant; E. Collard, Fairholme, Herne Bay, surveyor; and H. O. Spencer, 57 Upper George Street, W., gentleman. Registered without special articles of association.

CLEANSINE SYNDICATE (LIMITED).—Capital 10,000*l*, in 1*l* shares. Object: To carry on business as cleaners, dyers, dyersalters, druggists, oil and colour men, dealers in proprietary articles, wool-washers, tallow melters and refiners, soap-boilers, dealers in medical and chemical preparations, cooper, tinmen, braziers, glass-workers, &c., company promoters, and the general business of a financial agency. The first subscribers (who take one share each) are:—H. G. Clarke, Ormond House, Wimbledon, solicitor; W. J. Matthews, 49 Arthur Road, Finsbury Park, accountant; S. R. Wilshire, Birch Lodge, Wimbledon, gentleman; C. Hamm, 70 Portland Place, Clapham, bookkeeper; A. Cunningham, 32 Victoria Street, S.W., engineer; H. Cox, 25 Albion Grove, Barnsbury, engineer; and R. B. Troup, 61 Chandos Street, Charing Cross, gentleman. There shall not be less than three nor more than five directors. Qualification, 50*l*. Registered office, 47 Victoria Street, Westminster.

THE INCORPORATED AGENCIES (LIMITED).—Capital, 10,000*l*, in 10*l* shares. Object: To act as agents generally for the members of the medical, dental, veterinary, and clerical professions, and for chemists and others, in relation to or in connection with the investment, loan, payment, transmission, or collection of money, and in relation to or in connection with the purchase, sale, disposing of, or other dealing with improvement, development, or management of all kinds of real and personal estate or property, including medical, veterinary, and dental practices, &c.; to establish and carry on the business of partnership negotiators, and to procure partners, assistants, *locum-tenens*, or pupils for the medical, veterinary, and dental professions respectively, or for chemists, &c. The first subscribers (who take one share each) are:—L. V. Jones, 2 Bennett Street, St. James's, M.B.; A. E. Stainforth, 215 Piccadilly, W., gentleman; J. F. Cridland, 215 Piccadilly, W., solicitor; A. W. H. Allen, Constitutional Club, Chiswick, manager; W. Conseno, 34 Victoria Street, S.W., secretary; F. H. Cridland,

263 Strand, W.C., accountant; and H. C. Clements, 215 Piccadilly, W., gentleman. There shall not be less than three nor more than five directors; the first being appointed by the above subscribers. Qualification, holding shares. Remuneration, 5 per cent. (divisible) of the net profits of the company in each year, after the payment of a dividend at the rate of 6 per cent. per annum.

COMPANY MEETING.

ASHLEY'S PATENT BOTTLE COMPANY is not in a satisfactory way yet. At a meeting of the shareholders, on Wednesday, Mr. Alfred Backhouse, the chairman, reported that the trading account for the past year showed a loss of 283*l*. 5*s*. 1*d*., but after paying debentures, &c., the net loss was 2,290*l*. 18*s*. 3*d*. This was attributed to two causes—viz., the reduced price of bottles and the conversion of a gas-tank. In the course of the year the company produced 55,000*l* worth of bottles—that is, 880,000 dozen—and about one-fifth of these had been made by the machines. The company needs more money, and to get this it was agreed to issue the balance of pre-preference shares.

DEEDS OF ARRANGEMENT.

The following deeds of arrangement with creditors have been filed at the Bills of Sale Office, under the provisions of the Deeds of Arrangement Act, 1867. Some of these deeds are for the purpose of carrying out compositions with creditors (and such are specified below), but the great majority of them are "assignments" in the ordinary form, to a trustee or trustees, for the benefit of creditors. The Act referred to expressly provides that registration shall not give validity to any deed which is an act of bankruptcy, and there is no provision, in the Act making any of these arrangements binding upon dissenting creditors.

Teahan, Timothy Thaddens, 169 Clarence Street, Sheffield, surgeon. Trustee, John H. Freeborough, Sheffield, accountant. Dated, September 25; filed, September 28. Unsecured liabilities, 223*l*. 15*s*. 9*d*.; estimated net assets, 75*l*. Composition of 6*s*. 8*d*. in the pound, debtor covenanting to pay to trustee 5*l*. per month, commencing November 1, 1892, until he shall have paid sufficient to meet said composition, secured by assignment to trustee to realise in default. The following are scheduled as creditors:—

	£	s.	d.
Eydes, Wm., Sheffield	19	0	0
Hobson, Henry Parkes, Sheffield	27	15	0
Lofthouse & Saltmer, Hull	24	9	1
O'Connor, J., Sheffield	33	0	0
Wolfe, Amelia, Sanderland	49	10	0

Troughton, Christopher, 72 Oldhall Street, Liverpool, chemist. Trustee, Arthur Thraves, 15 Victoria Street, Liverpool, accountant. Dated, September 27; filed, September 30. Unsecured liabilities, 375*l*. 1*s*. 11*d*. Estimated net assets, 113*l*. The following are scheduled as creditors:—

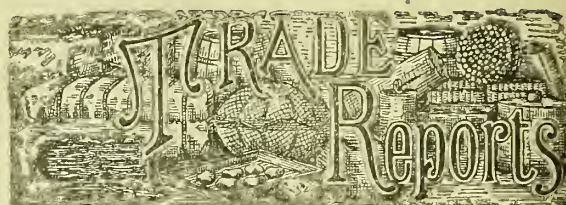
	£	s.	d.
Barron, Harveys & Co., London	40	0	0
Hiskath, —, Kirkby	10	0	0
Evans, Son & Co., Liverpool	95	0	0
Thompson, John	13	0	0
Jackson, H.	10	0	0
Ayrtton & Lamders	12	0	0
Harvey, Miss Agnes	10	0	0
Harris, Isaac	14	0	0
Bickersteth, Dr.	20	0	0
Rogers, Miss Annie	16	0	0
Oliver, James, Billom & Co. (Rent), Liverpool	62	0	0
City of Liverpool (Rates)	17	0	0

MARRIAGES.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

BLYTH—MACKENZIE.—On October 7, by special licence Mary Purves, only daughter of James Mackenzie, Leith, to John Blyth, chemist and druggist, Leith.

MATHER—REA.—On October 5, at the Congregational Church, Godalming, by the Rev. John Mather, father of the bridegroom, John Henry Mather, pharmaceutical chemist, to Annie Buick, youngest daughter of T. Rea, J.P., C.C. of Bridge House, Godalming.



Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., October 12.

ACID CARBOLIC).—Prices again rule decidedly lower since last Thursday.

ACID (CITRIC).—The English makers continue to quote 1*s*. 6½*d*. per lb. for B.P. acid, but second-hand holders are willing to undersell them to the extent of about ¼*d*. per lb. The market is decidedly weaker—"Merely in consequence of 'bear' speculation," say the sanguine ones; but nevertheless it is a fact that it is now possible to buy commercial (not guaranteed B.P.) acid at 1*s*. 6*d*. per lb. Juice is also less firm, and the quotations run from 21*l*. to 20*l*. 10*s*, f.o.b. According to Messina advices, dated October 7, juice for prompt delivery is very scarce, the stock, which amounts to 200 or 300 pipes only, being firmly held by speculators.

ACID (TARTARIC).—"In spite of the apparently neglected condition of this article," one of the makers told us, "there is a very good undercurrent of orders for consuming purposes, and buyers appear to be waking-up to the fact that the drug is really cheap at present." Second-hand stuff may be bought at 11½*d*. to 11¼*d*. per lb. according to brand; for English (B.P.) 12½*d*. per lb. is asked. Crude tartaric material has advanced in Sicily, where the vintage is said to have yielded only one-half of last year's production.

ANISE (STAR), in common with most products from the Far East, is rather higher, and importers now require 85*s*, c.i.f. terms, for November-December shipment, and 87*s*. 6*d*. c.i.f. Marseilles. Offers of 82*s*. 6*d*. c.i.f. have been refused. None is offering on the spot (where 112*s*. 6*d*. was the last price paid), but some is due almost immediately.

ANTIMONY.—Regulus has advanced to 44*l*. 10*s*. per ton.

BENZOLE may now be had at 1*s* 7½*d*. for 90, and 1*s*. 4*d*. for 50 per cent.

BROMIDE OF POTASSIUM.—The European makers have all raised their prices ¾*d*. per lb. this week, 13*d*. per lb. being now their price for quantities of 10 cwt. Dealers mostly appear to think that there is some foundation for the rumours that the hatchet is about to be buried by the German and American bromine-makers, though at present the belief seems to rest upon intuition rather than fact.

CAMPHOR (REFINED).—No change; English bells, 1*s*. 10*d*. per lb., usual terms; other shapes in proportion. German, 1*s*. 7½*d*. per lb. net.

CANARY-SEED.—Further sales of about 400 bags Turkish seed took place on Friday and Saturday at 80*s*., and since then holders have refused to accept that price.

CANTHARIDES.—For Russian flies, new crop, natural, 2*s*. 11½*d*., c.i.f. terms, is asked, and 3*s*. 3½*d*., c.i.f., for sifted ditto.

CARAWAY SEED.—Advancing. For fair quality Dutch seed, 22*s*. 6*d*. to 23*s*. 6*d*. per cwt. is required, and for fine bright, 24*s*. per cwt.

CASCARA SAGRADA.—The firmness of holders has brought business to a dead stop. We believe that 45*s*. is the highest price paid, but 50*s*. per cwt. is generally asked for good quality.

CHLORATE OF POTASH is lower. Business has been done at 7½*d.* per lb. f.o.b. Liverpool, and holders are offering freely at 6½*d.* per lb. for delivery over next year, or at 7*d.* for next month.

CHLOROFORM.—Another circular was issued by the English and Scotch makers last Friday, raising the price for *methy-lated* to 1*s.* 4*d.* to 1*s.* 6*d.* per lb., according to quantity. *Ketone* chloroform is quoted at 1*s.* 8*d.*; *Warrington* at 1*s.* 9*d.* per lb.

CREAM OF TARTAR.—Best white French crystals may be had at 82*s.* 6*d.* per cwt.; powder at 84*s.* per cwt.

GALANGAL is scarce, and higher prices are quoted—viz., 26*s.* 6*d.* per cwt., c.i.f. terms, for best quality. This quotation comes from Hamburg.

GALLS (CHINA).—Prices are reported higher to-day, and a good business is said to have been done on the spot at 53*s.* to 53*s.* 6*d.* per cwt. The latter price has been refused since. The c.i.f. quotation is 47*s.* per cwt.

GLYCERINE shows some signs of increasing firmness, and makers want 42*s.* 6*d.* per cwt. for double-distilled s.g. 1.260. We believe that the lowest price which was accepted lately was 40*s.* per cwt.

GUM OLIBANUM.—Prices have advanced considerably lately, and it is stated that a considerable amount of business has been transacted privately. At last week's auctions only a moderate quantity (450 packages) was offered, and of this about 270 packages sold, with a fairly good demand, at an advance of about 2*s.* per cwt. on good pale and reddish mixed to fine yellow drop, which brought from 26*s.* to 40*s.* 6*d.* per cwt. Yellow pea-sized siftings sold at 18*s.*, and fair to good garblings at 11*s.* to 15*s.* per cwt.

GUM TRAGACANTH.—Fine qualities are scarce and firmly held. For good pale druggists' (firsts) 11*l.* per cwt. has been paid, it is said.

INDIARUBBER is firm, fine Pará selling in a small way at 2*s.* 10*d.* per lb. on the spot.

INDIGO.—At the periodical auctions of East Indian indigo, which were held this week, 2,764 chests were offered. These included 1,123 Kurpah and 952 Bengal and Tirhoot kinds, the remainder being Oude, dry leaf Madras, Bombay, &c. The auctions proceeded with a good deal of animation, and the bulk sold at an advance, as compared with the July rates, of 6*d.* per lb. on all kinds of *Bengal* and *Oude* indigo. This is the full level of the advance paid privately since that auction. Good *Kurpah* kinds sold at from 4*d.* to 6*d.* per lb. advance on the last sale prices, but common kinds are difficult of sale. The stocks of East Indian indigo here and on the Continent have been much reduced, and the supply to be expected from Bengal is estimated to yield only 86,000 maunds, against 150,000 maunds in 1891. On the other hand, the reports from Madras are favourable.

IPECACUANHA.—There has been an arrival of 4 packages *Cartagena* root from Panama this week.

LYCOPodium is very scarce, and from 1*s.* 6*d.* to 1*s.* 6½*d.* per lb., c.i.f. terms, is asked.

NUX VOMICA.—The arrivals upon the Calcutta market are very small, and the stock firmly held.

OPIUM.—Our Smyrna advices are dated October 1. They state that, as regards the position of the market during the month of September, the demand may be described as having been very active, the total sales amounting to about 450 cases, 100 of which were taken against sales to the Dutch Government, and 350 of the talequale qualities chiefly for America and the continental markets. The prices paid were from 7*s.* to 7*s.* 4*d.* for Karahissar, 6*s.* 6*d.* to 6*s.* 7*d.* for Yerli talequale, 6*s.* 3*d.* to 6*s.* 4*d.* for current ditto, and 6*s.* 4*d.* to 6*s.* 5*d.* for old ditto ditto, per lb. f.o.b. The sales to the Dutch Government amount in all to 650 cases, deliverable during the next three months, 400 of which have been sold by Smyrna houses, who have hitherto secured only about 100 of suitable quality, and it is probable that the sellers will have, to pay more money to complete their requirements, the rejections being much larger than usual, not on account of want of intrinsic value, for the standard is good, but because the darkness of the paste is objected to by the Dutch Government. Thus far the season has been

very dry, and no progress has been made with the autumn sowings, which, in order to be successful, must be carried out next month. It is therefore probable that our market will go no lower than it now is, and it may advance if the drought continues. The total stock of new and old opium in Smyrna on September 30 was estimated at 3,000 cases.

QUICKSILVER is much firmer, although the principal importers have not yet raised their price above 6*l.* 7*s.* 6*d.* per bottle. In second-hand, however, 6*l.* 6*s.* 6*d.* has been paid.

QUININE.—On Friday last the activity of the market was in no wise diminished, and sales were made of B.&S. and Brunswick quinine, second-hands, at 9½*d.* per oz. on the spot, and up to 10½*d.* per oz. for delivery as far forward as February-March, 1893. Since then no further business has been reported, and the excitement has quite cooled down.

SAFFRON.—A Valencia correspondent writes:—"The lowness of the saffron prices has induced speculators to make further purchases; thus, in August of this year 2,759 kilos. changed hands, against 807 kilos. in August, 1891, and at the end of the month there remained a stock of only 2,800 kilos., against 7,000 kilos. in 1891. The sales from October 15, 1891 (beginning of the new crop), to August 31, 1892, were 30,455 kilos., against 25,680 kilos. in the corresponding period of 1890-91. It is not surprising that prices advanced slightly when these figures became known. The market closes very firm."

SHELLAC.—At the close of last week the delivery market showed a downward tendency, and prices closed lower, TN for November and December delivery being sold as low as 86*s.* per cwt. At the public sales on Tuesday 1,082 cases of lac were offered, of which about 700 sold at irregular prices, advancing towards the close, orange being generally 1*s.* to 2*s.* and garnet 1*s.* per cwt. dearer as compared with the last preceding sales, while button lac was steady. The following prices were paid:—Unworked, fair to good, 83*s.* to 86*s.*; ditto dark and livery, 82*s.* to 83*s.*; worked, good fair, 85*s.*; common livery to medium red, 81*s.* to 83*s.*; garnet, fine bright unworked AC, 74*s.*; button lac, fair to good second, 85*s.* to 88*s.*; ditto third, 76*s.* to 79*s.* per cwt. Since the auctions the market has been steady, but quiet, with small sales of October TN at 86*s.* 6*d.* per cwt.

SPICES.—The firmness of tone in several important departments of the spice branch, upon which we commented last week, has generally been well maintained. Early in the week a temporary depression showed itself in the delivery market for *Cloves*, and for October shipment 2½*d.* per lb. c.i.f. terms was accepted, but at the auctions there was a very good demand for Zanzibars, and out of 1,052 bags offered, 830 sold steadily at 2½*d.* to 3½*d.* per lb. for ordinary dark to good. The market for delivery is also rather steadier, with sales up to 3½*d.* per lb. for January-March. A considerable amount of business has been done this week. Good picked *Penang* cloves sold at auction at 1*s.* per lb. *Penang white pepper* has been in very strong demand privately, and during the early part of the week about 25 tons are said to have changed hands on the spot at 4½*d.* per lb. At auction 105 bags were bought in at 4½*d.* per lb., while for fair but somewhat dull Singapore 5½*d.* per lb. was paid. *Black pepper* is steady, but rather quiet; fair Alleppey sold at 3½*d.* per lb. at auction. *Pimento* is firmly held and slightly dearer, ordinary to fair selling at 2½*d.* to 2½½*d.* per lb. *Cassia Lignea* remains dull of sale, and may be had at 21*s.* 6*d.* per cwt. *Nutmegs* and *mace* are quiet. *Cochin Ginger* has been in demand privately, and about 1,000 packages of it were sold before the commencement of the auctions at 45*s.* to 48*s.* for rough and washed rough, 55*s.* for fine rough, and 60*s.* for cut. About 250 bags Bengal also changed hands privately at 29*s.* 6*d.* to 30*s.* per cwt. At the auction the tone was very firm, with sales of fair small to medium cut Cochin at 60*s.* to 70*s.* per cwt., good native cut bringing 67*s.* per cwt.

TONQUIN BEANS—Fine frosted *Angostura* beans are quoted from Hamburg at 7*s.* 9*d.* per lb., c.i.f. terms.

TURMERIC.—*Madras* root is very scarce, and has realised as much as 32*s.* per cwt. for good bright finger. Higher prices are reported for *Bengal* root from Calcutta, and our market has responded sympathetically; for fair quality from 20*s.* 6*d.* to 21*s.* per cwt. is now required. At auction 137 bags of *Madras* turmeric were bought in at 35*s.* per cwt., nominally.

WAX (BEES').—Bleached *East Indian* wax is very dull of sale. White kinds are worth, nominally, from 7l. to 9l. per cwt., according to quality, and yellow from 5l. to 6l. per cwt. To effect sales, however, holders would have to reduce their quotations.

WAX (JAPAN).—Since the completion of the business at the low prices reported last week the market has improved considerably; for good pale squares, on the spot, 37s. per cwt. has been paid, and there are now no further sellers at that figure, while for delivery sales are reported at 33s. 3d. per cwt., c.i.f. terms—the closing price in that position being 34s. c.i.f.

Thursday's Market News.

42 CANNON STREET, E.C., October 13.

London. The drug business continues to be of a very satisfactory character, and since last week several articles have again advanced in price, some very considerably. To-day's drug sales passed off with an excellent tone, a very large proportion of the supply offered being disposed of. The following are the principal alterations:—*Tinnevely senna* is very much higher, *ipecacuanha* dearer both for Rio and for Carthagena; *Loxa* and *Hnanoco* barks dearer, *Sumatra* and *Siam benzoin* also higher. *Buchu* leaves brought a very considerable advance, and for star-anise, Russian anise, star aniseed-oil, Japanese peppermint-oil, Japan wax, Jamaica honey, cumin and caraway-seed, areca-nuts, calumba-root, gum ammoniacum, senega-root, galaugal, musk, and kola-nuts higher prices must be conceded. China produce and to some extent, also, Japanese goods are generally all higher in price. Jamaica bees'-wax remains in small supply and at very high rates. *Carliamoms* in better demand. *Ergot-of-rye* is flat; gum kino and gum gnaiaicum slightly easier, and lime-juice also lower. In chemicals the principal alterations have been an advance in bromide of potassium, a slight rise in chloroform, and somewhat higher prices for glycerine. Citric acid and chlorate of potash are lower, and quinine has again become quite neglected. In outside articles we have to report a somewhat wavering market for shellac (which on the whole is rather easier), higher prices for antimony, gambier, canary-seed, China galls, gum olibanum, East Indian indigo, and cochineal. Spices remain firm, particularly cloves and white pepper. Quicksilver is slightly higher to-day. Linseed oil lower, rape oil quiet, and turpentine steady. The Bank rate remains at 2 per cent.; bar silver is quoted at 38½d. per ounce, and the Bombay and Calcutta Exchanges stand at 1s. 2½d.

New York. Our New York correspondent states in a communication dated October 5 that the drug trade is in quite a flourishing condition, a considerable volume of business being transacted and this for the most part at increased prices. The majority of inquiries are for consumption, though there is some speculative interest in one or two lines. Canadian *balsam of fir* is reported quite scarce, stocks have been concentrated, and, as a consequence, holders advanced to \$2 to \$2.10. Three thousand pounds *Pará copaiba* sold from first hands at 36c. *Cascara sagrada* has again advanced and is quoted at 10s., with sales of 10,000 lbs. at that figure (see cable of last week). *Tonquin beans* are firm though quiet at \$2 50 for Angosturas, and 75c. to 77½c. for Paras. *Vanilla* beans, Mexican are selling well at very stiff prices, which are difficult to quote because of the wide variation in the qualities. *Peppermint* oil is quiet; holders of HGH wanting \$2.65 to \$2.70, while \$2.60 is the limit offered by exporters. Wayne County (New York) growers seem confident of an advance, and but little is coming into the hands of local dealers. While the average in that section is reported smaller, the yield has been larger per acre than usual. *Gum chicle* remains firm at 22c. to 22½c. with jobbing sales, but no large business reported. *Senega* has rapidly advanced, and sales have been made at 45c. to 55c., the aggregate business during the interim both in the West and on the spot amounting to some 30,000 lbs. For further supplies 55c. to 60c. is wanted on the spot. There have been further arrivals of Mexican *Sarsaparilla*, and Tuxpan from first hands is now available at 8½c., while for

Tampico 9c. to 9½c. is wanted. In a jobbing way ½c. more is demanded. *Honduras* continues at 30c. to 40c. as to brand. *Jalap* is inactive, quotations ranging from 26c. to 36c. as to quality, quantity, and holder. *Guarana* is dull and easy at \$1.10. *Cream of Tartar* is in better supply at 23c. to 23½c. *Tartaric acid* is steady at 24½c. for crystals, and 25½c. for powdered with a fair demand. *Bromide of Potassium* was advanced last week, and is now quoted at 24s. for German and 25c. to 26c. for domestic in bulk. *Carbolic acid* is weaker and less active at 13c. to 14c. for crystal in drums. *Bleaching powder* is in better supply, and prices are declining, casks offering on the spot at 3c., and barrels at 4c., while even lower figures might be got to arrive. Domestic makers have advanced *Strychnine* 5 cents per oz. to \$1 15 for crystal in ½-oz. bottles in lots of 500 lbs., \$1 20 in lots of 100 lbs., and \$1.25 for smaller quantities. Powdered, 5c. less. The stock of *Curacao aloes* is closely concentrated and firmly held at 2½c. to 3c. Domestic *Sugar of milk* is active at 18c. spot, and 17c. for forward contracts. The demand for *opium* is slack, and quotations unchanged. *Quinine* is in good consumptive demand, and moves out at unchanged prices of 18½c. to 19c. for foreign in large bulk, and 20c. for domestic in large bulk. *Acetanilid* is offering with increasing freedom, and bulk may be had at 45c. to 47c., short *buchu* leaves are scarce and wanted, stock is held at 12c. to 13s. 200 barrels of Norwegian cod liver oil sold at \$22 to \$22 50, and \$22.50 to \$23 is asked for additional parcels. *Cuttle bone* is active at 13½c. *Shellac* is quiet at steady prices. *Camphor* is in demand at 48c. to 49c., and very firm. *Ipecacuanha* is in good jobbing demand, and has advanced to \$2 10 to \$2.25. *Rhubarb chips* have advanced to 26c. to 27c., and are sparingly offered. *Canary seed* has advanced on the strength of foreign advices, with sales of 200 bags of Smyrna reported at 4½c.; at the close 4½c. to 5c. is asked.

ACONITE.—Forty-six bags Japan root were again bought in at 22s. 6d. per cwt.

ALOES.—No *Cape* aloes was offered to-day. Of *Curacao* aloes, 80 packages were placed in sale to-day, and sold at 19s. 6d. per cwt. for dark brown; and 9s. 6d. for common drossy kinds. Fine qualities are scarce, and none were shown to-day. *Socotrine* aloes keeps steady at the recent decline: of 60 kegs offered to-day, 30 sold at 100s. per cwt. for soft brown rather darker ditto brought from 77s. 6d. to 80s.; and dull to blackish from 62s. 6d. down to 50s. per cwt. Two parcels, together 118 packages, *Cape* aloes have just been imported here from Mossel Bay.

ANISE.—Of 30 bags rather dirty *Russian* anise, 20 brought the very high price of 23s. per cwt., showing a decided advance in value.

ANNATTO.—For 2 bags of good bright Ceylon *Seed* 2½d. per lb. was paid privately, and two other similar parcels were also sold at 2½d. to 2¾d. per lb.

ARECA.—Thirty shillings was accepted for a small lot out of a parcel of 25 bags offered at to-day's sales, but afterwards 6 bags brought from 32s. to 32s. 6d. per cwt., showing some improvement in value. A parcel of chopped and wormy arecas was bought in at 25s. per cwt., a bid of 14s. being refused.

BALSAM (COPAIBA).—Four casks rather thin clear red brown balsam were bought in at 1s. 10d. per lb. Another parcel of 18 tons from Bahia, dull thick grey quality with a good deal of sediment, was bought in at 2s. per lb.

BALSAM (TOLU) is slow of sale. Good quality changes hands in a small way at 1s. 2d. per lb.

BUCHU.—In consequence of these scanty imports, coupled with the scarcity of supply here, prices went considerably higher at to-day's auctions. Eight bales of round leaves, just imported, of good flavour, but rather mixed with stalk and slightly off colour, realised from 7½d. to 8d. per lb. (1½d. to 2d. advance on the last sales). A dull lot fetched 6½d. per lb. For 7 bales false long serrate leaves, quite odorless, catalogued "without reserve," no bid could be obtained. There has only been one small import of 5 bales from Cape Town since our last report.

CALUMBA.—The market is improving, and at to-day's auctions a fair proportion of the stock offered sold at a

recovery of 2s. to 2s. 6d. per cwt. on the recent collapse. Thirty-three bags gray mixed to good partly pale sorts brought from 22s. 6d. to 26s., dark root 19s., and ordinary dusty chips 12s. per cwt. Another parcel of seven bags fine washed root was bought in at 40s. per cwt.

CANNABIS INDICA is somewhat difficult to sell. Out of the market of 41 packages offered to-day, 10 sold at 4d. per lb. for rather stalky tops of fair colour.

CARDAMOMS.—A considerable quantity was offered at to-day's auctions—the total consisting of 270 packages. The demand was excellent, much better than has been shown for a considerable time, and although prices were irregular, holders sold freely, and disposed of 291 boxes at the following prices:—*Ceylon Mysore*: Good to fine, medium to bold pale heavy, 3s. to 3s. 4d.; medium to bold yellowish ditto, 2s. 4d. to 2s. 5d.; good medium to bold long pale, 1s. 7d. to 1s. 8d.; small ditto, 1s. 2d.; medium to bold round and pale mixed, 1s. 10d. to 2s. 2s.; yellowish ditto, 1s. 7d. to 1s. 9d.; very small pale, 1s. 2d. to 1s. 3d.; medium size fair shape brownish, 1s. 3d. to 1s. 4d.; small, 1s. 1d.; *Tellycherry* rather lean brown medium, 1s. 2d.; common pale *Seed*, 10½d. per lb.

CASCARILLA.—Of 23 bales dusty thin and brown bark three sold at 20s. to 23s. per cwt. Another lot of 15 casks just imported *via* New York, very dusty small brown, was bought in at 20s. per cwt.

CASTORUM.—Several small parcels, altogether about 300 lbs. weight, were offered to-day, and about 127 lbs. of those sold at very high prices: mixed sizes partly damp, 42s to 44s, ordinary to fair, 26s. to 36s. 6d.; very common pickings, 5s. per lb.

CINCHONA.—A parcel of 71 bales *Huanoco* and *Lora* barks, just arrived from Payta, sold at to-day's auction with strong competition at from 3d. to 4d. per lb. above the valuations; fair to good bright *Lora* realising 1s. 9d. to 2s.; medium, 8d. to 1s.; and ordinary broken dull *Huanoco* from 6d. down to 3d. per lb. A few damaged bales of spurious stout flat *Calisaya* brought 6d. to 7d. per lb. at auction, and further sales were made privately after the auctions. *Maraicao* and *Cartagena* barks are scarce.

COCA-LEAVES.—Privately, about 4,000 lbs. *Huanoco* leaves offered. Strong brown mixed have recently been sold at 1s. 4d. per lb., and a small parcel of fine bright green *Truxillo* at 2s. per lb. Of the former, further supplies may still be bought at the same price; but of *Truxillo* leaves, of which very little is offering now, 2s. 1d. is asked.

COCCULUS INDICUS.—A parcel of 252 bags sold at auction to-day at 8s. 3d. to 8s. 6d. per cwt. without reserve, a rather better price than could have been anticipated.

COCHINEAL has advanced. For black *Teneriffe* grain, 11d. to 11½d., and for silver ditto, 11½d. to 12d. per lb. has been paid. The stock is now considerably reduced, being only 2,798 bags on October 1 against 3,619, 4,170, 4,255, and 4,444 bags respectively on the corresponding dates of the four preceding years.

CUBEBS.—A newly imported parcel of 30 bags, from Batavia, good brown and black, partly pale mixed, not stalky, was bought in at 6l. 10s. to-day. Up to 5l. 7s. 6d. was bid and refused. Ten bags slightly stalky, blue and rather dark mixed berries from Bombay, are held for 6l. per cwt.

CUMIN-SEED.—The principal holder of *Malta* seed states that he hopes to obtain 47s. 6d. per cwt. soon for good quality, old seed having been sold recently at 42s. 6d. per cwt. He maintains that, instead of 1,500 to 2,000 tons, the total output of seed of all kinds in ordinary years, there will not be more than 200 tons available this season.

CUSCUS.—One single bale of fair quality brought 13s. per cwt. to-day.

CUTTLE-FISH.—Steady at the low prices already ruling. The demand remains fairly good, and of 79 cases from Bombay offered at auction, 40 sold at 2½d. to 3d. per lb. for fairly good palish part broken.

DRAGON'S-BLOOD.—Holders of fine gnm, of which there is very little to be had, stand out for high limits, about 10l. 10s. being asked for fine fiery sancers. At to-day's

anctions 28 packages, mostly rather inferior, were offered, but only sold at 80s. per cwt. This consisted of earth and other rubbish, coated with genuine gum. For rather dark drop from Bombay, 60s. per cwt. is asked.

ERGOT OF RYE.—There is not very much offering, but the market is flat, and it is very difficult to effect sales at the high limits now asked. At to-day's anctions good Spanish was bought in at 2s. 10d. to 3s. per lb., and for rather wormy German 2s. 2d. was asked without response.

GAMBOGE.—Although not one single case was offered at to-day's anctions, there is a fair supply of all kinds in the warehouse.

GUARANA.—Several parcels are offering privately at 4s. 3d. for ordinary, and 7s. 6d. for very fine quality. At to-day's anctions one case ordinary mouldy sold at a much lower price.

GUINEA-GRAINS.—Three bags brought the rather high price of 25s. 6d. per cwt. at to-day's auctions.

GUM AMMONIACUM is from 4s. to 5s. per cwt. dearer. Six cases small to medium good loose tear, partly blocky, sold at 40s. per cwt., and for a lot of pale drop, mixed with block and siftings, a bid of 45s. was refused.

GUM ARABIC.—We hear that small sales of good pale genuine Soudan sorts have been made privately at 75s. per cwt., which shows a steady market. A large quantity (but which is said to be below the standard as regards quality) is expected to arrive in the course of this month. Seventeen bales of Cape gum sold to-day at low prices: very dusty soft sorts, mixed with dark and amber pieces, at 38s.; grey to dark brown dull glassy drop, at 30s. to 34s. per cwt. Of Turkey gum several parcels sold at 7l. to 8l. 10s. for grey to fair small picked drop.

GUM BENZOIN.—Of *Sumatra* gum 97 cases offered at auction to-day, 33 of which sold at an advance of from 5s. to 7s. 6d. per cwt. Fine seconds, small to bold almondy centres, slightly false packed at sides, 7l. 10s. to 7l. 12s. 6d.; rather duller ditto, 7l. 2s. 6d. Some good bright almondy *Palembang* gum brought from 44s. to 45s. *Siam*, which was in fair supply, also sold at an advance of about 10s. per cwt. as compared with the last sale price, fair small almonds, partly blocky, bringing 10l. to 10l. 2s. 6d.; darker and smaller ditto, 7l. 15s. to 8l. 2s. 6d.; dull grey blocky siftings, 5l. 12s. 6d.; and common grey siftings in block, 80s. per cwt. The arrivals of benzoin remain small, the *Sumatra* variety especially being scarce.

GUM (GUALIACUM).—Slightly easier; for fair bright block 1s. 4d. was accepted to-day, while common dark and broken very dusty mixed with dark sold at 3½d. to 6d. per lb.

GUM (KINO).—Three cases were offered to-day, one of which sold at 100s. per cwt. for fair Bombay. This seems slightly below the sales recently reported privately.

GUM (MYRRH).—From 75s. to 80s. was paid to-day for dusty to fair but rather drossy mixed Aden sorts, for fine pickings 52s. 6d. was refused, and good pale selected is held for from 7l. 5s. to 7l. 10s. per cwt., but there was no response at these prices. The new crop ought to be coming in now; but it is said that there will be little or none this year. Good pale myrrh is scarce, and firmly held.

HONEY.—*Jamaica* sells well at easier prices; 29s. to 31s. per cwt. (about 2s. advance on the last sale rates) being realised to-day for good to fine bright amber liquid, 25s. to 27s. 6d. per cwt. for fair clean brown, and 21s. for ordinary common. A parcel of 23 cases of a dark-brown liquid honey, not unlike *Jamaica* in appearance, imported from *Calcutta*, sold cheaply to-day at 14s. 6d. to 15s. per cwt. Of 40 cases *Australian* honey, 10 cases (each two 56-lb. tins) good clean yellow candied, sold at 30s. per cwt.

IPECACUANHA.—Forty-seven packages of *Rio* root were offered at to-day's sales by two brokers. The first parcel was one of exceptionally good quality, and realised 9s. 6d. to 9s. 7d. per lb. for fine stout sound root, and from 9s. 3d. to 9s. 5d. for fair quality. The second parcel was wiry and woody, and only a few serons of it sold at 9s. per lb. for sound rather thin, and from 9s. to 9s. 2d. for fair to good damaged. It is difficult to make any comparison between this sale and that of a fortnight ago, because the qualities

of the root offered were so dissimilar. On the whole, the first parcel may be said to have sold at an advance of about 3*d.* to 4*d.*, while the second was not quite up to the last sale price. *Carthagena* root, of which 20 packages were offered, is from 3*d.* to 4*d.* per lb. dearer. Only a few lots were sold, at from 6*s.* to 6*s.* 2*d.* for good stout quality.

JALAP.—None was offered at to-day's auctions, but privately sales have been made at the rate of 1*s.* 5*d.* per lb. for fair Vera Cruz. The market is firm.

KOLA-NUTS.—Some few packages *West Indian* kolas were offered to-day, all of which sold with good competition at rising prices—fine pale bold dried, 11*d.*; good, ditto, 9½*d.*; fair wormy, 7½*d.* per lb.

LIME JUICE, both from Dominica and from Jamaica, is in large supply, but the article is quite neglected, and only one or two packages sold at the low figure of 8½*d.* per lb. for rather dirty quality.

MATÉ—We are asked to state that the parcel sold without reserve at the last auctions was very considerably sea-damaged.

MUSK.—In small supply. Only one caddy of first-pile *Tonquin* pods, well trimmed dry small to bold thin blue skin and underskin, sold to-day at 76*s.*, which is equal to an advance of about 3*s.* per cz.

OIL (CASTOR).—One hundred and twenty-four cases of good pale first Calcutta oil sold very cheaply without reserve, at 3*d.* to 3½*d.* per lb.

OILS (ESSENTIAL).—*Star-anise* oil is about 3*d.* per lb. dearer, 6*s.* 2*d.* per lb. being to-day's spot quotation, while 5*s.* 7*d.* per lb. "c.i.f." is asked to arrive. Oil of *cassia* is unchanged for shipment, and on the spot it is reported to have sold privately at 3*s.* 3*d.* per lb. *Menthol* is held at 10*s.* to 10*s.* 6*d.* per lb. on the spot, and Japanese oil of *Peppermint* is inquired for and higher. The crop in Japan is said to have been very small this season, and all available stocks there are reported bought up by Chinese dealers. Cocking's price is 8*s.*, native brands are quoted at 6*s.* spot, and from 5*s.* 9*d.* to 6*s.* per lb. c.i.f. South Australian *Eucalyptus* oil has been advanced to 3*s.* to 3*s.* 3*d.* per lb. (according to quantity). *Rose* oil from Bombay sold to-day at 6*d.* per oz. Fifty cases *Japanese* oil of *camphor* were bought in at 22*s.* 6*d.*, and one copper *Sandal-wood* oil (from Bombay) at 15*s.* per lb. For neither of these were there any bids. For English oil of *Cloves*, 2*s.* 4½*d.* to 2*s.* 6*d.* per lb. is now asked, according to quality, and for *Caraway* oil, similarly, from 5*s.* 3*d.* to 5*s.* 6*d.* per lb., but we do not believe that these prices have yet been paid.

ORANGE-PEEL.—Eight bags ringlets of fair quality were bought in at 7*d.* per lb. to-day.

PATCHOULY.—Twenty-six bales dull dusty brown leaves rom Penang were bought in at 4*d.* per lb.

QUICKSILVER is firmer to-day, and it is expected that the price will be raised by the importers; both first and second-hands now hold at 6*l.* 7*s.* 6*d.*

QUINCE-SEEDS.—For one bag from the Cape a bid of 6½*d.* per lb. was refused.

QUININE, after having been altogether lifeless this week shows a little more animation to-day, although no business has yet been done; 9½*d.*, it is said, has been refused for a large quantity of second-hand German bulk, and 9¼*d.* is the lowest price.

RHUBARB.—Although a fairly large quantity was offered at to-day's auctions—namely, 94 cases—most of it is limited much above the present market value, and only 16 cases sold at firm prices, with an advance of about 1*d.* on good *Shensi* root. It is said that the bulk of the crop has now been imported, and some of the merchants talk of raising their limits. *Shensi*, round small to medium fair coat, three-fourths pinky, one-fourth dark in fracture, brought 1*s.* 8*d.* to 1*s.* 9*d.*; ditto, rather smaller and duller in coat, 1*s.* 6*d.*; bold pale coated, round, good grey pinky fracture, 2*s.* per lb. *Canton*, small to medium fair coat, three-fourths pinky fracture, one-fourth dark, round, 1*s.* 3*d.* per lb. *High-dried*, common stalks, 8*d.* per lb.; for small flat, slightly wormy, 1*s.* 2*d.* was refused; and for ordinary dull wormy, a bid of 8*d.* was also rejected.

ROSE-LEAVES.—Two boxes fine bold English leaves (from Bodicote) are offered at 6*d.* per lb., but that price was not obtainable at the auctions.

SARSAPARILLA—Fourteen bales *Grey Jamaica* root were offered, but of these only six sold at 1*s.* 4*d.* per lb. for slightly damaged, showing no alteration in value. Native Jamaica, rather dull to common pale, sold at 12*d.* down to 9*d.* per lb. to-day.

SENEGA.—A decided advance was established at to-day's auctions, when 4 bales good bright chumpy root brought 2*s.* 10*d.* per lb. Up to that time 2*s.* 6*d.* per lb. had been, we believe, the highest figure paid.

SENNA.—The sensation of the auctions to-day was the sale of *Tineelly* senna, of which the moderate supply of 415 bales, mostly of new import, was offered. Of this quantity 346 bales sold (mostly for export to the States), at prices which have rarely been equalled. The quality was better than at the last auctions, and there were several good parcels, though none of exceptionally fine quality. The prices realised were:—Very low dark and stalky to small yellowish specky, 1½*d.* to 3*d.*; ordinary to medium yellow and greyish, 3*d.* to 4*d.*; fair small to medium greenish, 4½*d.* to 6½*d.*; good bold mixed green, from 7*d.* to 10½*d.*; and good to very good bold, though specky mixed, from 11*d.* up to 1*s.* 5½*d.* per lb.; ordinary and medium kinds were steady, to about 1*d.* dearer, but fair to good kinds sold at from 4*d.* to 7*d.* per lb. above the valuations. *Pods* are fast becoming unsaleable, the quantities imported being far in excess of the demand. At to-day's auctions about 120 bales were offered, of which fully half sold at a fresh decline in prices—viz., 1½*d.* to 2*d.* for sound, partly dark, and from ¾*d.* to 2½*d.* for damages.

TEA.—Congous are quiet and though there has been some export demand for Saryunes the home trade inquiry is dull and buyers are indisposed to pay the recent advance on lower grades. Scented capers are in large supply and though the import this season will be substantially below that for last season the diminution is not sufficient to counterbalance the over-supply of last year, and large quantities of common old tea in dealers' hands bought at very low prices, are very hard to move. Indians are fairly steady at last week's prices for lower grades, but fine teas are irregular, in some cases easier. Ceylons are very firm, scarcely any clean leaf tea selling under 6*d.* per lb. in breaks, and medium grades are well competed for.

TONQUIN BEANS.—Small dull black Pará beans sold at 1*s.* 3*d.*, while for fair, slightly red mixed, 1*s.* 6*d.* per lb. is asked. Mouldy pickings brought from 3*d.* to 6*d.* per lb., and good black frosted Pará are reported to be selling privately at 1*s.* 11*d.* per lb.

VALERIAN-ROOT.—Belgian may be had at 32*s.* to 32*s.* 6*d.* per cwt.

WAX (BEES').—*Jamaica* wax is fully 2*s.* 6*d.* per cwt. dearer again. Of 41 packages 32 sold at 7*l.* 10*s.* for very fine yellow, 7*l.* to 7*l.* 5*s.* for good to fine orange, and 6*l.* 12*s.* 6*d.* to 6*l.* 17*s.* 6*d.* for grey to red mixed. *Madagascar* is in large supply, with small sales at 100*s.* to 107*s.* 6*d.* per cwt. for fair brown to good yellow. Of *Zanzibar* bees-wax 2 bags of fair brown colour, but slightly wormy, sold to-day at 100*s.* per cwt.

THE SMYRNA OPIUM MARKET.

(Telegram from our Correspondent.)

SMYRNA, Wednesday night.

THIS week's sales of opium upon our market amount to 40 cases manufacturing opium of the usual kind at the parity of 6*s.* 4*d.* per lb., f.o.b., and 30 cases Karahissar at the rate of 7*s.* 3*d.* per lb., f.o.b.



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulæ consult the last volume, if you have it.

Letters, queries &c., will be attended to in the order received.

Is Water-analysis a Failure?

SIR,—The object of my paper, referred to in your issue of October 1, was chiefly to point out that, relying upon the analysis of a water alone, many samples were passed as "safe" by analysts when the source from which they were obtained would show, upon examination, that they were liable to intermittent pollution often from most dangerous sources. The examination of the sources of supply is one of the duties of a medical officer of health, and I therefore contend that when he considers the analysis of a sample of water desirable he should himself be able to undertake it. My experience has taught me that no one is justified in certifying that water from any source is "safe" unless the source has been carefully examined. If an analyst has had experience in such investigations, or if he insists upon having such an examination made by some competent person before giving an opinion as to the safety or otherwise of a water, there can be no objection to his expressing such an opinion. How often, however, does an analyst make any inquiry of this character? I have never seen a report yet from a chemist making any reference to it.

A mere chemical analysis, by whomsoever made, is often sufficient to condemn a water. There is no difficulty with such waters. The danger lies in certifying that a water is sufficiently pure for use for drinking and other domestic purposes merely because the free or albuminoid ammonia or some other factor happens to fall below some arbitrary standard fixed by the analyst.

In my Writtle report, referred to by Mr. Parry, the chemical evidence was merely adduced to support my previous statements that the subsoil was so polluted that the water furnished by it could not be considered a satisfactory supply.

My thoughts have been especially drawn to this subject recently by the fact that in two or three instances this year I have had occasion to attribute disease to the use of waters certified by analysts to be good, and which I found were subject to intermittent pollution; and on the other hand I have had to allay the alarm caused by the condemnation of a water which had never been known to cause any illness, and which it was almost absolutely certain could not be contaminated by any pernicious matter.

The one thing I wish to impress not only on chemists but also on medical men and the public, is that the thorough examination of the source and surroundings of a water-supply is of far greater importance than the results of an analysis. Your very able article of October 1 shows that you, Sir, incline to the same opinion.

The Limes, Chelmsford.

October 11.

J. C. THRESH.

SIR,—Sir G. Buchanan's experience appears to have been peculiar. So far as I have had opportunity of judging, analysts usually agree very closely in their results of water-analysis, and are generally in harmony as to the interpretation of the same. Of course, there is a debatable ground in water-analysis as in many other departments. There is, for instance, room for difference of opinion as to the amount of

albuminoid ammonia which should be held to condemn a water (other things being favourable), and the exact signification of nitrites and nitrates may be open to dispute. But to argue (as some medical officers seem inclined to) that because water-analysis is not perfect, and because it cannot answer biological questions, it is to be regarded as a failure, is a most inept conclusion, and contrary to all experience. I believe that in ninety-nine cases out of a hundred an unwholesome water will indicate its bad character to chemical analysis, and any chemist could give accounts of suspected samples which on examination abundantly displayed their evil nature. In some exceptional cases a water which has been considered passable by the chemist may be found to contain bacilli capable of causing disease. Yet the medical officer will admit that water which is highly charged with organic nitrogenous matter is more likely to act as a nursing medium for dangerous organisms than is pure water; so that on this ground alone chemical analysis would seem to be of some value. Not long ago the inhabitants of a certain village complained of the quality of their water-supply. On analysis it gave only one unfavourable indication—viz., '22 part per million of albuminoid ammonia. This is one among many proofs we have had of the justness and accuracy of Mr. Wanklyn's conclusions as set forth in his treatise on water-analysis.

I am, sir, yours very truly,

Edinburgh, October 6.

D. B. DOTT.

Liquid Extract of Cascara.

SIR,—I observe in your issue of September 3 that Mr. Moss refers in very kind—I might almost say flattering—terms to my remark on his process for cascara extract, quoted in your columns the previous week. As this quotation was only a portion of a note by me on the subject in the *Indian Medical Record*, I fear Mr. Moss has been misled by the apparent curtness of my criticism. I was referring to the many futile attempts made during the last few years to produce a tasteless and efficient liquid extract, and I expressed my approval of Mr. Moss's process in principle, although I had failed here to produce a satisfactory result on account of the difficulty referred to. I have not since had an opportunity of making another trial, but when I do I will avail myself of the suggestion Mr. Moss has kindly put forward.

It may interest Mr. Moss to know that some four years ago, when tasteless cascara was in such great demand, I was called upon to prepare a quantity, but was unable to obtain any of the bark nearer than London. Our firm having a large stock of liquid extract on hand, I made some experiments with a view to converting it into a tasteless preparation, with the result that I devised a process exactly like Mr. Moss's in principle—viz., evaporating to small bulk, diluting largely to precipitate the resin, filtering (I used magnesia to assist this part of the process), and again evaporating and adding the necessary spirit. This process gave a miscible, almost tasteless, and therapeutically most efficacious preparation, and when it was desired to cover the very slight residual bitter taste this could easily be accomplished by means of aromatics.

Although I do not presume to pose as an authority on the subject, this experience leads me to approve of Mr. Moss's process; but I also agree with that gentleman in that great deal—everything, in fact—depends upon the quality of the bark used to start with.

I am, &c.,

Bombay, September 24.

THOMAS STEPHENSON.

Pharmaceutical Education in Dublin.

SIR,—I wish to secure your interest on behalf of our educational projects, and feel sure I shall not appeal in vain.

We have got an excellent School Committee, who have charged themselves with providing recreation and instruction for our alumni. Tuesday evening, November 1, will witness our first effort at reviving our evening scientific meetings, when Professor Titchborne, LL.D., will deliver a lecture on carbonic acid.

It is needless for me to say one word on behalf of Professor Titchborne's learning or ability to impart information on a subject he has made peculiarly his own.

It is the intention of the committee to hold a series of monthly lectures during the winter session in the splen-

did examination hall of the Society in Great Mount Street. For the December meeting MacDowel Cosgrave, M.D., M.Ch., F.R.C.P.I., and for the January meeting Rodolph Burnes, A.B., M.D. Dub. Univers., have consented to deliver lectures on interesting and relative subjects. These lectures will all be free to members of the Pharmaceutical Society, associate druggists, and their assistants. We have ample room, and shall be very pleased to see a large audience.

Yours truly,

October 12. RODOLPH A. C. BURNES, M.D., T.C.D.

Irish Chemists and Druggists.

Mr. W. C. Hinchy, pharmaceutical chemist, Kilmallock, sends us a very long letter in expansion of his arguments addressed to the annual meeting of the Pharmaceutical Society of Ireland. Mr. Hinchy holds that the Council have admitted to registration as chemists and druggists men who had no claim to the title. We cannot open our columns to a discussion on this point. The Council appear to have discharged a difficult and delicate task with general fairness, which is evidenced by the fact that they are complained of on both sides. Mr. Hinchy also wishes to correct the statement that he gave 10% towards the prosecution of an offender. He merely guaranteed that amount.

A Peculiar Lime-water.

SIR,—I recently noticed in your Answers to Queries a note on a pink coloration of milk, which you suggested was due to the presence of salicylic acid. Something similar has recently come under my notice—viz., a bright pink coloration of milk when mixed with lime-water procured from one particular firm of chemists. This vivid pink colour arose equally with samples of milk from several dairies. I jumped to a similar suspicion of an admixture of the milk with salicylic acid, and I found, on experimenting, that the addition of salicylic acid to the lime-water did actually give the same striking reaction.

But I also found that the same colour arose from admixture with boric acid, and with a good sample of olive oil—i.e., in making lin. calsis., B.P.

And, again, liq. ferri perchlor. added to the milk gave no coloration whatever, as it snely would have done if salicylic acid were present; whilst the iron added to the lime-water gave a bright cherry-red.

Lime-water from another source gave rise to none of these remarkable appearances.

I may add that I have called the vendor's attention to these peculiarities, but he offers me no elucidation that commends itself as meeting these facts.

Yours faithfully,

October 3. PUZZLED. (130/37.)

[Has anyone met with similar phenomena? We can detect nothing peculiar about the lime-water further than the faint violet coloration which it gives with a salicylate. It is possible that this may be due to the presence of a minute trace of metallic impurity other than iron.]

The Recent Major Examination.

SIR,—There are two questions regarding the above that I should like to ask the powers that be:—

1. Is it legal to hold the examination in September, when it is advertised to be held in October?

2. If so, why were the students of Bloomsbury Square only, and not the students of other schools, informed of the pending change until the last moment?

The proceeding was certainly not just, and it is hardly the way to popularise the Major examination among young pharmacists.

Yours,

ROHAMI. (138/61.)

DISPENSING NOTES.

Strychnine and Iodide Mixture.

SIR,—Will you kindly inform me, through the columns of THE CHEMIST AND DRUGGIST, the best course to adopt in a case of this kind?

A patient brought me a prescription to dispense written by a doctor quite three hundred miles distant. The patient himself lives thirty miles from the nearest chemist.

Potass. iodid. . . . .	..	..	..	..	5v. 9j.
Liquor. strychninæ. . . .	..	..	..	..	5ij. m40
Syr. aurantii . . . . .	..	..	..	..	3j. m160
Aq. ad . . . . .	..	..	..	..	3xvj.

M. Ft. mist.

3ss. ex aqua. ter in die sd.

As written, a copious precipitate of acicular crystals will fall after a day or two. Would it be justifiable to substitute 10-minim doses of tinct. nux vomica for the liq. strychnin., and, if this be adopted, is there any likelihood of the strychnine in the nux vomica being thrown down?

Faithfully yours,

Fort Beaufort, Cape Colony,

S. M. MACKENZIE.

September 10.

[We have had this made up for ten days, and there is no crystallisation.]

A Double Query.

SIR,—With reference to the mixture under this heading a presentable mixture may be obtained by dissolving the quinine in the spt. ammon. aromat. and pouring the solution into the aq. camph., then adding the tincture. It also keeps perfectly well.

ROHAMI. (138/61.)

Homœopathic.

SIR,—Can you say what the following prescription is composed of?—

Carb. anim. 3x trit.	3ss.
------------------------------	----	----	----	----	------

Two grains to be sniffed up the nostril.

PUZZLED. (137/6.)

[Yes; 1 part of animal charcoal and 999 parts of milk-sugar. That is to say, 1 part of the charcoal is triturated with 9 parts of milk-sugar; then 1 part of that trituration is triturated with other 9 parts of milk-sugar, and again 1 part of this trituration is manipulated with 9 parts of milk-sugar in the same way. Hence 3x, or third decimal.]

How Can This be Done?

A homœopathic practitioner in Hobart was the writer of the following prescription, and "C. H." (132/37), one of our subscribers out there, would like to know how these directions are to be got on a label for a 2-drachm bottle. If any smart writer on this side can do it, we shall be glad to receive the specimen. The prescription is:—

Tinct. helon. dioicæ φ . . . .	..	..	..	..	3j.
„ chinin. arsen. . . . .	..	..	..	..	3j.

Doses: Three drops in half a wineglassful of water three times a day on alternate days until the desired result is obtained, and then omitted for a week or ten days and resumed again, until all pain in the side ceases, and no palpitation troubles any more.

Oil of Pine Tar.

SIR,—Occasionally, lately, I have been asked for an ointment for eczema, consisting of—

Oil of pine-tar . . . . .	..	..	..	..	5j.
Vaseline . . . . .	..	..	..	..	5j.

I fancy the recipe must be taken from a current periodical. Can you please tell me what oil of pine tar is?

PELAGOS. (130/64.)

[We think ol. picis rect. is indicated here, pine-wood being the source of wood-tar. It may, however, be that oil of birch-tar (ol. rusci) is meant, that being a favourite remedy for eczema.]

LEGAL QUERIES.

130/16. Carboy.—You cannot register a word at Stationers Hall. The only valid registration is as a trade-mark. The

fees in ordinary cases are 5s. on application, and a further 20s. if your application is accepted. If not, you lose your 5s.

126/71. *A. J. N.*—We think you can safely use a trade name different to your own. This is done by a number of eminent pharmacists. The President of the Pharmaceutical Society, Mr. Carteighe, for instance, trades as Dinneford & Co., and we presume that when he sells poisons and poisonous proprietary medicines he gives Dinneford & Co., as the name of the seller. You would not be justified, we think, in adopting a special fictitious name for your poisonous proprietary medicine labels. The fees payable for registering a trade-mark amount to 25s. in cases where no opposition is involved.

131/61. *J. W. T.*—The first point raised by "Querulous Questioners" in reference to your poisonous patent-medicine label is worth attention. If, instead of saying it "can only be purchased from a qualified chemist," you will say it "can only be sold by a qualified chemist," your assertion will surely be more accurate. In regard to their second point we agree with you that the label does sufficiently fulfil the requirements of the law.

137/9. *Boom.*—We should not expect that either of the titles you name used alone is registrable. Both seem to be descriptive. We cannot, however, undertake to make trade-mark searches. You can do this at the Trade Marks Office, Southampton Buildings, on payment of 1s. per quarter-hour.

137/7. *G. D. C.*—Chloroform, being a scheduled poison, can only be sold by registered chemists. Whether the sale of a mixture containing a minute proportion of chloroform is legally a sale of chloroform is, to say the least, doubtful. The point has never been argued in or decided by a Court, and nobody can answer the question authoritatively.

123/68. *Lex.*—Respecting the formation of a joint-stock company, we would advise you to get a book on "The Law of Joint-stock Companies," published by Edingham Wilson, Royal Exchange, London, price 1s. 6d. Your sous could be shareholders.

131/50. *Ignoramus.*—County-court costs vary, but we have never heard of one in which a chemist is allowed for his attendance on a higher scale than other tradesmen.

136/3. *Eureka.*—The titles "medical hall" and "drug hall" are not protected. That of "botanic druggist," used by a person not registered under the Pharmacy Act, would be an infringement of that statute.

135/45. *Dental.*—The Dentists Act does not extend to the Isle of Man, but we cannot say whether dentistry or the titles associated therewith are in any way protected there. Nor can we tell you the law affecting dentists in France. But it is certain that if in either part it is possible to assume the title, this would not suffice to allow anyone to break the law subsequently in this country. If an unregistered man associate himself with a registered man, and the two describe themselves as dentists, the former is liable to prosecution and a penalty.

176/3. *J. W. C.*—Your label is very much on the borderline. On page 92 of "Alpe's Handy-book" you will find a recommendation, nearly similar, of toothache tincture, which is considered "not liable," but your label goes a little further in recommending, under "Dose," the use of the mixture in urgent cases until relief is obtained. Upon the whole, we think it would be held at Somerset House to exceed the regulations as to recommendation of non-dutiable labels.

181/29. *Bon Accord* asks: "If a wholesale firm send out an adulterated article, and they inform you that they will defend any action when a chemist is summoned, can the chemist come upon the wholesale firm for damages claimed by the Court if the firm object to defend?" [Such an undertaking on the part of the wholesale firm, if in writing, and clearly including the articles sued upon, seems to render them responsible. Unless it expressly referred to the particular article alleged to be adulterated, the guarantee would not amount to a warranty, which you could plead in defence. If you are in time, you had better get their letter promising to defend stamped at Somerset House.]

138/59. *Stramonium.*—There is no limitation by law of the quantity of strychnine you may sell to a customer.

MISCELLANEOUS INQUIRIES.

123/44. *F. J.* wants us to tell him how to make a good mixture from the following prescription for Digestive Syrup:—

Ext. aloes aquos	..	..	..	..	3ss.
" glycyrrh. liq.	..	..	..	..	3ij.
Potas. carb.	..	..	..	..	3ij.
Pulv. boracis	..	..	..	..	3ss.
" capsici	..	..	..	..	3ij.
Ol. sassafras	..	..	..	..	℥℥℥℥℥.
Ext. cascara sagradae	..	..	..	..	3iv.
Glycerin. pur.	..	..	..	..	3vj.
Theriac	..	..	..	..	℥℥℥.
Tr. nucis vom.	..	..	..	..	3iss.
" belladon.	..	..	..	..	3iss.
Spt. rect.	..	..	..	..	3ij.
Ext. gentian.	..	..	..	..	3vj.
Pulv. cinchon. cort.	..	..	..	..	3ss.
Ext. tarax.	..	..	..	..	3iss.
Aque ad	..	..	..	..	℥℥℥.

[The syrup is not intended to be a clear one. Dissolve the borax and carbonate of potash in 10 oz. of warm water, and with this rub the extracts to a smooth cream, then add the powdered capsicum and cinchona. Mix well, add the treacle and glycerine, and finally the tinctures, making up to the required volume with water.]

114/17. *Kilogramme* asks the formula for Dr Burney Yeo's Inhalation of iodoform, eucalyptus, &c. Not knowing anything of the kind, we have communicated with Dr. Burney Yeo, who replies: "I am not aware that I have ever published any such formula. Certainly I have no special inhalation that I am in the habit of using."

113/11. *Zingib.* submits a sample of Orange Colouring for Aerated Water which, he says, gives a range of colour from a lemon-yellow to a dark orange. The colouring, we find, is a solution of Chrysoidine (diamidoazobenzene hydrochloride). This dye is precipitated yellow by alkalies, even by London water, and is decolorised by tin and hydrochloric acid. It resembles aniline orange and orange III. in these respects, but the dry dye has a characteristic violet colour with a metallic lustre, and, unlike the former, is not so susceptible to change to red on addition of acids.

117/56. *Boots.*—The knife-powder appears to be a natural product of the nature of rottenstone.

123/71. *J. T. (Hauley).*—See the DIARY book-list.

124/13. *Inquirer.*—The preparation is suitable, but see the index to last volume.

129/9. *W. W.*—We have heard that oily butter-colouring is used in Frying Fish to give the rich yellow colour. Try it.

120/13. *Juba Warren* sends us from Jamaica a sample of a plant which grows abundantly there, is known as *Juba Warren*, and has the odour of lemongrass. This plant is *Pectis punctata*, a composite nearly allied to *Tagetes*. Regarding its medicinal properties or commercial value we can tell nothing, having failed to find anything about it in all likely sources of information. Our correspondent has, perhaps, a good opportunity of introducing a new drug if he knows anything about its use in the West Indies. Whether it is at all likely to compete with lemongrass as an oil-producer is also a point which might be worth inquiry.

124/76. *Sp—Cloudy Ammonia*.—We have not published a formula for a preparation under this name. There is an old preparation, sometimes called "lightning cleanser," which may go by that name. The following is a modified formula for it:—

Curd soap	3ij.
Washing-soda	3ij.
Borax	3j.
Solution of ammonia	0j.
Methylated spirit	3ij.
Methylated ether	3ij.
Oil of eucalyptus	3iss.
Water to	cong. j.

Shave the soap into shreds and dissolve in 3 pints of warm water, then add the soda and borax. When cold add the oil dissolved in the spirit and ether, shake, and make up to a gallon with water.

The quantity of ether may be doubled if desired. It is very effective in softening dirt on clothes in the same way as paraffin; presumably while it is volatilising.

124/59. *Yorks.—Water-softener*.—We generally recommend equal parts of slaked lime and dried carbonate of soda. Water softened by this or any other softener is not fit for drinking if the softener is added by rule of thumb. See THE CHEMIST AND DRUGGIST, May 9, 1891, page 651.

125/23. *Sedative*.—You should use codeine in place of the acetate of morphine in the following Cough-mixture. From the therapeutic point of view, the opium in the tr. camph. co. is not required, and that also may be omitted.

Acid. sulph. dil.	3 oz.
Morph. acet.	18 grs.
Vin. ipecac.	4½ oz.
Syr. scillæ	15 "
Tr. camph. co.	12 "
Spt. chlorof.	6 "
Glycerin.	30 "
Syrup. ribis	12 "

M.

Dose: A teaspoonful.

127/21. *C. B.*—Yes; filter the Nursery Hair Lotion.

127/16. *Inquirer (Halifax)* informs us that he dispensed equal parts of Cocaine Hyd. and Chloral Hydrate dissolved in water for toothache from a prescription. On applying it to the aching tooth on wool, serious illness followed. The doctor called in and said it could not arise from using the application. A fortnight passed and the person again used the application, with the same results of illness. How can this be accounted for?—Assuming that nothing in the nature of chemical substitution takes place on bringing the two ingredients together, we should say that the effect is the result of idiosyncrasy of the patient. Some persons are peculiarly sensitive to the physiological action of cocaine.

126/19. *Scientia*.—Some Willows do not contain salicin. You can roughly determine whether your infusion does or not by taking a pint of it and adding to it solution of subacetate of lead until a precipitate ceases to fall. Allow the precipitate to settle and decant the clear liquid, through which pass a stream of sulphuretted hydrogen to remove

excess of lead; boil and filter. Evaporate the filtrate to a low bulk, when salicin, if present, will crystallise out. If you get any it may be worth your while treating with a maker of salicin for the daily decoction of 1 ton of the willow. You could sell it as an extract.

136/14. *Small Town*.—We think your criticisms are expressed with unnecessary bitterness.

Information Wanted.

Replies to the following are requested by subscribers of THE CHEMIST AND DRUGGIST.

124/53. *Py-cy-nine powder* for the complexion: who makes?

137/52. Formula for Stokes' senega mixture; a naval hospital prescription.

136/18. What is the American preparation called syrup of figs?

125/41. Formula for pulv. alkalizæ co.; an Irish preparation.

134/35. The address in Bristol of the maker of "Vesico-Sudorific."

Gazette.

PARTNERSHIPS DISSOLVED.

Darlow & Fairfax, Plaistow, Essex, physicians and surgeons.

Duke, J. C., and Robinson, L., Lewisham, surgeons and physicians.

Edwards & Campbell, Crediton, surgeons and apothecaries.

Hallawell, J., and Symes, C., under the style of J. Hallawell & Co., and Symes & Co., Liverpool, wholesale and retail and export pharmaceutical chemists.

THE BANKRUPTCY ACTS, 1883 AND 1890.

RECEIVING ORDERS.

Griffiths, Thomas, Bowyer House, Clapham, paint-manufacturer and managing director of Griffiths' Pyroline Fire-proofing Company (Limited), of Dashwood House, New Broad Street, E.C.

Jessup, Robert Markham, Swinefleet, near Goole, out of business, late chemist and druggist.

Jones, Owen, Carnarvon, mineral-water manufacturer.

Saunders, Thomas Bealby, late of Liversedge, and Saunders, Ashby Varley, late of Bradford (trading as Saunders & Saunders), Cleckheaton, chemical manufacturers.

ADJUDICATIONS.

Jessup, Robert Markham, Swinefleet, near Goole, out of business, late chemist and druggist.

Jones, Owen, Carnarvon, mineral-water manufacturer.

Next Week.

Secretaries of Associations and Societies should give the Editor post-card notice of meetings to be held, and the business to be transacted thereat, by Wednesday of the week before.

WEDNESDAY, OCTOBER 19.—*Royal Microscopical Society*, 20 Hanover Square, at 8 P.M. On "Methods for Staining Medullated Nerve Fibres," by Dr. C. E. Beevor. "Heterosporium asperatum—a Parasitic Fungus," by Mr. G. Massee. "Notes on the Use of Monochromatic Yellow Light for Photomicrography," by Dr. H. G. Piffard.

WEDNESDAY, OCTOBER 19.—*Brighton Junior Association*. Annual dinner, at the Café Royal, East Street, Brighton. Secretary, Mr. A. P. Nosworthy.

THURSDAY, OCTOBER 20.—*Chemists' Assistants' Association*, 103 Great Russell Street, W.C., at 8.30 for 9 P.M. Mr. E. P. Parry, B.Sc., on "The Chemistry of Alkaloids."

SATURDAY, OCTOBER 22.—*Edinburgh Pharmacy Athletic Club*, cross-country run in connection with, from the Grey Horse Inn, Dalkeith Road, at 3.30.

20 HIGHEST AWARDS.

Pears' Soap

Soap Makers
by Appointment to



H.R.H.
The Prince of Wales.

RETAIL PRICES.	6d.	SIZE, unscented	-	-	-	Per Dozen.	4s.	WHOLESALE PRICES.
	1s.	„	all shapes, Washing or Shaving				8s.	
	1s. 6d.	„	Ditto		ditto		12s.	
	2s. 6d.	„	(The Washing Tablets are perfumed with Otto of Roses)				20s.	
	<hr/>							
TRANSPARENT GLYCERINE		2s.	per Box of 3 Tablets		16s.	Per dozen Boxes.		

DISCOUNT of 20 per Cent.
On all ORDERS of NOT LESS than **£5.**
(GROSS TRADE-PRICE VALUE.)

If accompanied by Remittance,
[Lesser Quantities 15 per Cent. Discount only.]

IMPORTANT STATEMENT.

No Dealer in the Kingdom, "Wholesale or Retail," for any quantity whatever obtains more than the above **20 PER CENT.** Discount.

(Signed), *A & F Pears*
71-75, NEW OXFORD STREET, LONDON, W.C.

CRESCENT



BRAND.

BICARBONATE OF SODA,

REFINED AND RECRYSTALLIZED.

PURE AND CHEAP.

ANALYSIS.

Bicarbonate of Soda	...	...	...	...	97.20
Mono Carbonate of Soda	...	...	...	...	1.90
Sulphate of Soda	...	...	...	...	trace
Chloride of Sodium	...	...	...	...	.035
Moisture	...	...	...	...	.82
Insoluble	...	...	...	...	nil

PURE ALKALI,

GUARANTEED 58 DEGREES.

EQUAL TO 98 PER CENT. OF CARBONATE OF SODA.

Most economical form of Soda for the use of Printers,
Bleachers, Dyers; Glass, Paper, and Soap Makers.

CONCENTRATED CRYSTAL SODA

(Sesqui-Carbonate).

By far the Purest and Cheapest form of WASHING SODA.

Only 1 lb. of Concentrated Crystal Soda required to do the work of 2 lbs. of Washing Soda.

SODA CRYSTALS

OF THE FINEST QUALITY.

BRUNNER, MOND & CO., LIM.

*Manufacturers of Soda by the Ammonia Process,***NORTHWICH, CHESHIRE.**

SPECIAL NOTICE TO CHEMISTS

"LOYD'S LEICESTER"



The manufacture of Soluble Pearl Coated Pills was first introduced into Leicester by Mr. T. HOWARD LLOYD (18 years partner in the firm of JOHN RICHARDSON & CO.), and they are now made with the most complete and modern machinery, ensuring accuracy and uniformity, by

T. HOWARD LLOYD & CO. HIGH STREET, LEICESTER.

SOLUBLE PEARL COATED PILLS

Special NET CASH List.

In Ten Gross and One Pound Tins for CASH WITH ORDER.

						Per gross.	Per lb.
Pil. Aloes et Ferri, P.B.	...	...	...	...	...	6d.	4/-
Colocynth. Co., P.B.	...	...	...	...	...	11d.	8/-
Colocynth. et Hyos., P.B.	...	...	...	...	...	1/1	9/-
Rhæi Co., P.B.	...	...	...	...	...	6d.	4/3
APERIENT.	105	<i>(Each Pill contains ½ gr. of Calomel)</i>				6d.	4/3
106	As No. 105, with 1 gr. Calomel in each Pill	...	...	...	...	6d.	4/6
107	As No. 105, without Calomel	...	...	...	...	6d.	4/3
110	Hospital Pills, each containing ½ gr. of Calomel	...	...	...	...	6d.	4/6
ANTIBILIOUS.							
62	Hydrarg. Pil. gr. i.; Ext. Coloc. Co.; Pil. Rhei Co. aa. gr. ij.	...	...	...	...	1/-	8/6
262	Podophyllin gr. ½; Ext. Coloc. Co. gr. ij.; Ext. Hyoscy. gr. i.	...	...	...	...	1/2	10/-
COUGH.							
164	Pulv. Ipecac. Co.; Pulv. Gum. Ammon. aa. gr. iss.; Pulv. Scillæ gr. i.; Saponis Hispan. gr. ss.	...	...	...	...	7d.	5/-
167	Pulv. Ipecac.; Pulv. Scillæ aa. gr. ¾; Pulv. Capsici; Pulv. Opii aa. gr. ¼; Pulv. Gum. Ammon.; Ext. Conii aa. gr. i.	...	...	...	...	8d.	5/6
CASTOR OIL.							
289	Rhei Pulv.; Potass. Sulph. aa. gr. iss.; Pulv. Sapo. Hysp.; Ol. Ricini aa. gr. ss.; Ol. Crotonis gr. ⅙	...	...	...	...	6d.	4/-
TONIC.	370	<i>(Blaud's Formula)</i>				6d.	4/-
	371	<i>(Blaud's Formula, Martindale's improved)</i>				6d.	4/-
"LITTLE" APERIENT.	458	...	...	...	...	5d.	20/-
"LITTLE" ANTIBILIOUS.	462	...	...	...	...	5d.	20/-

Samples of the above with our Complete List sent on application.

In ordering, please note Address, and see that the Label on each Bottle or Tin corresponds with the above Block. [1]

SALICYLIO ACID AND SALICYLATES

MANUFACTURED UNDER KOLBE'S PROCESS BY

J. HAUFF, FEUERBACH - STUTTGART.

To be obtained from the Sole Agents.

N.B.—Stock kept in London.

FUERST BROS., 17 PHILPOT LANE, LONDON, E.C.
Telegrams—"FUERST LONDON." Telephone No. 1050.

LOFTHOUSE & SALTMER,
MANUFACTURING CHEMISTS, WHOLESALE & EXPORT DRUG MERCHANTS, HULL,
Manufacturers of all Pharmaceutical Preparations on the best and most improved principles. Quotations on application.
DEALERS IN PURE CHEMICALS for Medicinal, Photographic, and Commercial purposes.

Importers of Cod Liver, Castor,
and Olive Oils; Extra Super
Essence of Lemon and Berga-
mot, Otto de Rose, and all



Essential Oils; Valentia Saf-
fron; Vanillas; Fruit Essences;
Carmine, Aniline Dyes; Bees'
Wax, &c., &c.

MANUFACTURERS of Very Superior Flexible Gelatine Capsules of Balsam Copaiba, Cascara Sagrada, Castor Oil, Cod-liver Oil, Santal Oil, &c. Samples and Lowest Quotations per 1,000, or in Boxes for Retail, will be sent on application for either the Wholesale or Retail Trade.

Established
1848.

Established
1848.

THOMPSON & CAPPER,
WHOLESALE & EXPORT HOMŒOPATHIC CHEMISTS,
55 BOLD STREET, LIVERPOOL,
AND
51 PICCADILLY, MANCHESTER.
ILLUSTRATED PRICE LIST ON APPLICATION.

THOMPSON & CAPPER'S DENTIFRICE WATER.

Sells well everywhere, its beneficent qualities being attested to by physicians in all parts of the world. (See Testimonials.)

In 1s. 6d., 2s. 6d., 4s. 6d., and 8s. 6d. Bottles.

WILLIAM FOX & SONS,
WHOLESALE DRUGGISTS, &c.,
109 & 111 Bethnal Green Road, London, N.E.

Cabinet Varnishes, Polishes, Glaze, Finishing Spirit,
Glues, Wood Stains, Gums, Resins, Shellacs.

PRICES FORWARDED ON APPLICATION.

TELEPHONE NO. 1498.

LEO & CO.'S COMPRESSED DRUGS

Maintain their high reputation against all comers for general excellence of quality and finish.

SPECIAL LINES.

	1 lb.	7 lbs.
CHLORATE OF POTASH	1/-	/11
CHLORATE OF POTASH AND BORAX	1/-	/11
COMPOUND SULPHUR	1/-	/11
SODA BICARB.	1/-	/11
SODA MINT	1/-	/11

NET CASH WITH ORDER.

[1]

A FULL ASSORTMENT OF COMPRESSED GOODS KEPT. PRICES ON APPLICATION.

8 CREECHURCH LANE, LONDON, E.C.

BISHOPS'

"ORIGINAL"
GRANULAR
EFFERVESCENT
PREPARATIONS.



SILVER MEDAL, PARIS, 1889. HIGHEST AWARD FOR GRANULAR PREPARATIONS.

PIPERAZINE.

5 grs. in 60 grs.

This new remedy for Gout and kindred disorders, now being so largely tried by the Profession, is best given in our Granular Effervescent form.

Price per lb. .. 28/4
Size per doz. .. 38/6

PIPERAZINE WITH PHENOCOLL HYDROCHLORIDE.

5 grs. of each in 60 grs.

Our Granular form is the best method for the administration of this new remedy for Rheumatic Gout, Rheumatism, &c.

Price per lb. .. 33/4
Size per doz. .. 45/-

PHENOCOLL HYDROCHLORIDE.

5 grs. in 60 grs.

The new remedy for Neuralgia and Neuralgic Pains, especially in Influenza and ailments accompanied by feverish symptoms.

Price per lb. .. 8/4
Size per doz. .. 21/-

PHENACETIN.

5 grs. in 60 grs.

The value of this new preparation as an antipyretic and analgesic is now fully established. The Granular form is a very convenient and pleasant one for its administration.

Price per lb. .. 5/-
Size per doz. .. 12/-

LISTS FREE.]

AND ALL OTHER GRANULAR PREPARATIONS

[LISTS FREE.



Price Lists Post Free on application.

None genuine without this Trade Mark.



ALFRED BISHOP & SONS, LIM^D.

MANUFACTURING CHEMISTS, "Speck's Fields," 48 Spelman Street, LONDON, Eng.

R. W. GREEFF & CO., 29 MINCING LANE,
AGENTS FOR

J. D. RIEDEL, BERLIN,

SPECIALITIES.

**SULFONAL-RIEDEL,
PHENACETIN-RIEDEL,
THIOL-RIEDEL,
PEPSIN-RIEDEL,
CHLORALHYDRATE-RIEDEL,
AND
SALIPYRIN-RIEDEL**

(This article is sold Wholesale by Messrs. ALLEN & HANBURYS,
Plough Court, Lombard Street, E.C.)

DR. HENRY BYK'S PURE CHEMICALS.

ACID. PYROGALLIC BISUB.

Professor Dr. Vogel says:—" . . . light snowy white and carefully prepared article—DISSOLVING COMPLETELY and quickly in water or alcohol."

Professor Dr. J. M. Eder says:—"Dr. Byk's Pyrogallic Acid is exceedingly light and bulky . . . as good an Acid as can be produced."

This is the lightest, and consequently purest, Pyro in the trade.

**AMMONIUM BROMIDE.
COLD CHLORIDE.
HYDROQUINONE.**

**DR. BYK'S PERMANENT HYDRO-
QUINONE.** PATENT. Light yellow crystals. Insensible to moist air and light.

SODIUM BROMIDE.

ACID. BENZOIC. E RESINA.

Guaranteed to be sublimed from and retaining the fragrance of Gm. Benjamin.

ACID. CALLIC. CRYST. CHEM. PURE. Perfectly white needles.

ACID. TANNIC.

Purest quality, powdered and granulated. Dissolves colourless in water, alcohol, and ether, free from resinous and colouring matter. For medicine and finest work in art.

ACID. TANNIC LEVISSIMA PUREST.

Dissolves colourless in water, alcohol, and ether, free from resinous and colouring matter. Used for similar purposes as the chemically-pure powder.

IODOFORM CRYSTALS.

POTASH BROMIDE CRYST.

POTASH IODIDE CRYST.

RENNET POWDER.

SODIUM BENZOATE.

SODIUM IODIDE.

BISMUTH SALICYLATE.

STRONTIUM BROMATE.

SALICYLIC ACID AND

SALICYLATE OF SODA.

Chemically and Physiologically Pure.

SOLE WHOLESALE AGENTS:

R. W. GREEFF & CO., 29 Mincing Lane, **LONDON, E.C.**

A VERY LONG WAY APART

RICHARDSON'S
PRIZE MEDAL
SOLUBLE
PEARL - COATED
PILLS.

IMITATIONS AND
CHEAP SUBSTITUTES.

DONT BE MISLED.

JOHN RICHARDSON & CO., LEICESTER, Ltd.

THE
"STANDARD OF QUALITY"

ESSENTIAL OILS

MANUFACTURED OR SELECTED BY

DODGE & OLCOTT,

NEW YORK, U. S. A.

ESTABLISHED 1798.

OILS BAY, CARAWAY, CLOVES, CUBEBS, PEPPERMINT, SANDAL
SASSAFRAS, SPEARMINT, TANSY, WINTERGREEN,
WORMWOOD AND MANY OTHERS.

AGENTS FOR THE UNITED KINGDOM -

ASHMORE & SON,

AGENT FOR THE CONTINENT OF EUROPE -

6 MINCING LANE

CHAS. WESTPHAL,

London, E.C.

195 Upper Thames Street,

London, E.C.

NEW ZEALAND.

KEMPTHORNE, PROSSER & CO., NEW ZEALAND DRUG COMPANY, LIMITED.

**WHOLESALE DRUGGISTS,
MANUFACTURING CHEMISTS, AND COMMISSION MERCHANTS,
Head Office and Factory, DUNEDIN.**

BRANCH HOUSES:

**High Street, CHRISTCHURCH,
Hunter Street, WELLINGTON,
Shortland Street, AUCKLAND,**
Patent and Proprietary Medicines Agency.

**NEW ZEALAND.****LONDON AGENTS—**

Messrs. GRIMWADE, RIDLEY & CO., 82 Bishopsgate Street.

INDIA.

PEAKE, ALLEN & CO.

**CHEMISTS, DRUGGISTS
AND
GENERAL MERCHANTS,
LUCKNOW, OUDH, INDIA,**

Possess exceptional facilities for the introduction of NEW SPECIALITIES, Patent Medicines, Druggists' Sundries, Perfumery, &c.

CHARLES DELACRE & CIE.

(Pharmaciens de 1 classe),

**WHOLESALE AND RETAIL CHEMISTS
AND DRUGGISTS.**

CH. DELACRE, PHARMACIEN.
AMB. DELACRE, PHARMACIEN.

ESTABLISHED 1853.

Montagne de la Cour, Brussels.

GENERAL AGENTS

For BELGIUM and HOLLAND [2]

MESSRS. BURROUGHS, WELLCOME & CO.'S

"Tabloids" and other Productions.

UNITED STATES.

B. KEITH & CO.,

MANUFACTURERS OF

**PURE CONCENTRATED
MEDICINES,
CONCENTRATED TINCTURES, ETC.**

We make a full line of RESINOIDS, such as PODOPHYLLIN, LEPTANDRIN, EUONYMIN, IRISIN, HYDRASTIN, &c., ALL PURE.

So-called Concentrations are in the market, called by the same name as manufactures, that are made by triturating extracts, &c., with sugar of milk, powered root, &c.

WHAT ARE CONCENTRATED TINCTURES?

They are not made from the crude material, but by dissolving the active principles in Alcohol in definite proportions, and invariably represent a uniform amount of therapeutic power.

Send for printed matter on CON. TINCT. AVENA SATIVA in the Morphia or Opium Habit, and certificates from different members of the Medical Profession, citing cases under their charge treated by it; also REVISED AND ENLARGED MANUAL; also Price Lists, to

B. KEITH & CO.,

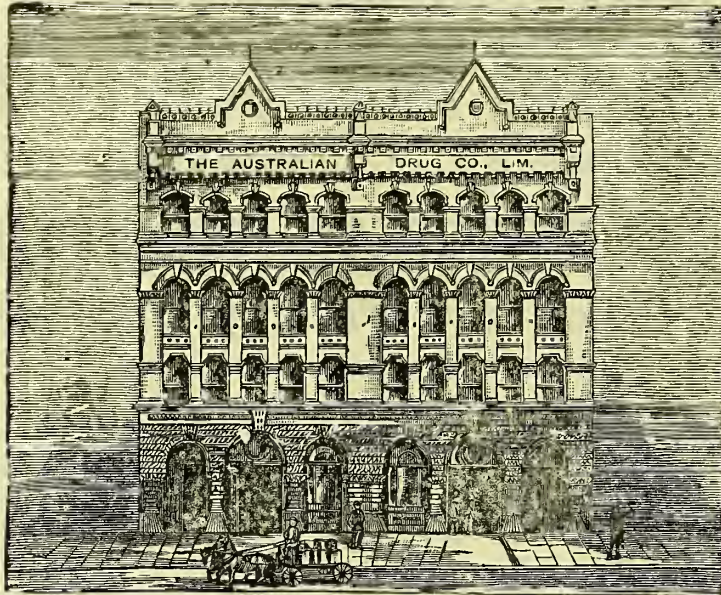
75 WILLIAM STREET, NEW YORK, U.S.A.

NEW SOUTH WALES

THE AUSTRALIAN DRUG CO., LIM.,

LATE E. PROSSER & CO.,

IMPORTERS OF PATENT MEDICINES, DRUGGISTS'
SUNDRIES, DYE GOODS,
SURGICAL INSTRUMENTS, PERFUMERY,
FANCY SOAPS, SPONGES.



IMPORTERS OF BRUSHWARE, CORDIAL MAKERS,
MACHINERY, CORKS, BOTTLES, LABELS,
PHOTOGRAPHIC CHEMICALS AND MATERIALS.

Wholesale Druggists, 19 & 21 O'Connell Street, SYDNEY.

Agencies for Patent Medicines and other Goods solicited. Travellers cover New South Wales and Queensland.

London Agents: LAUGHLAND, MACKAY & BAKER, 50 Lime Street. E.C.

NEW SOUTH WALES.

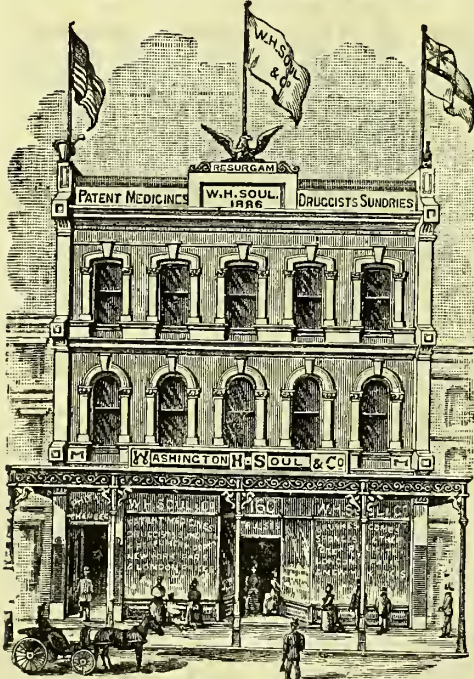
W. H. SOUL & Co.

Nos. 158, 160, 162, & 268
PITT STREET,
SYDNEY, N.S.W.

Will be pleased to
fill any lines from their
large Stock, which the
Trade may be unable
to obtain from their
usual Jobbers.

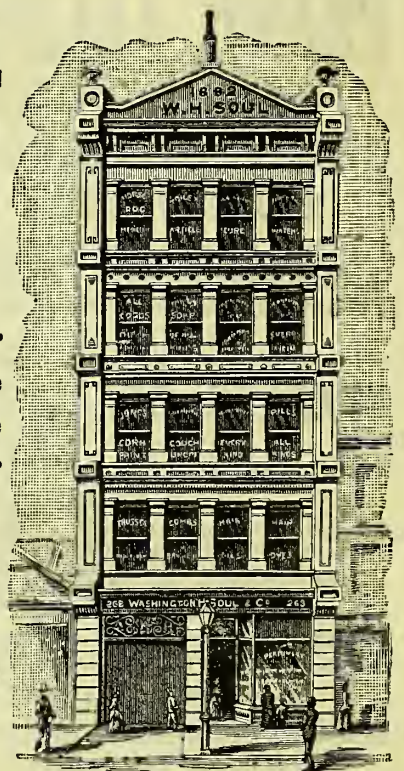
TERMS CASH.

W. H. S. & Co. can arrange
with pushing Houses to receive
Goods on Commission for
prompt Sale in this Colony.



7 DOORS FROM KING STREET.

44



4 DOORS FROM PARK STREET.



ESTABLISHED 1870

PROSSER, TAYLOR & CO.

(LATE BERKLEY, TAYLOR & CO.),

**WHOLESALE DRUGGISTS AND IMPORTERS,
AND
MANUFACTURING CHEMISTS
BRISBANE, QUEENSLAND.**

CONTRACTORS TO THE QUEENSLAND GOVERNMENT.

Importers of Drugs, Chemicals and Druggists' Sundries, Patent Medicines and Perfumery; Surgical Instruments, Photographic Sundries, Confectioners' and Dyers' Goods, Dental Sundries, Soda Water Machinery, Bottling Racks, Egg-shape and Lamont's Soda Water Bottles, Corks, Essences, Labels, and all Cordial Makers' Requirements.

All parts of Queensland visited at regular intervals by experienced Travellers.

Agencies solicited from Firms who are prepared to actively introduce their Manufactures into the Colony.

LONDON AGENTS—

MESSRS. LAUGHLAND, MACKAY & BAKER, 50 LIME STREET, E.C.

JULIUS LEVY,

Wholesale Druggist & Sundryman, Charlotte Place, Sydney; Mill Place, Flinder's Lane, Melbourne


AGENT FOR

HEINRICH HAENSEL—Olea aetherea sine terpeno, Lemon and Orange, 30 times Concentrated.

E. MERCK—Alkaloids, Glucosides, and Pure Chemicals.

ROBERT FRÈRES—Triple Extraits and Olive Oil.

STEVENSON & HOWELL—Finest Essential Oils, Soluble and Fruit Essences.

W. TOOGOOD— Brand of Dispensing Bottles and Druggists' Sundries.

SAMPLES AND QUOTATION SOLICITED. AGENCIES UNDERTAKEN ON THE MOST ADVANTAGEOUS TERMS.

Correspondence invited, and should be addressed to Charlotte Place, Sydney. Special facilities for introducing new lines

B. G. LENNON & CO., LTD.

Wholesale Druggists, Manufacturing Chemists, and Druggists' Sundriesmen,

CAPE TOWN, PORT ELIZABETH, AND EAST LONDON.

With Branches in all Important Centres in South Africa.

AGENTS FOR THE NATAL DRUG CO., DURBAN, NATAL.

LONDON OFFICE: 14 BUNHILL ROW, E.C.

AGENCIES UNDERTAKEN ON ADVANTAGEOUS TERMS.

FELTON, GRIMWADE & CO.,

Wholesale Druggists and Manufacturing Chemists,
MELBOURNE, VICTORIA.

LONDON AGENTS:—

Messrs. GRIMWADE, RIDLEY & CO., Mildmay Chambers, 82 Bishopsgate Street.

Wholesale Agents for Bosisto's Genuine Oil of Eucalyptus.

VICTORIA.

ROCKE, TOMPSITT & CO.
WHOLESALE DRUGGISTS,
MELBOURNE,

AND

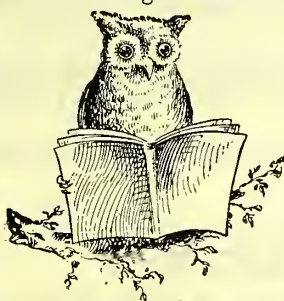
119 & 120 LONDON WALL, E.C.

Samples and Quotations solicited.

Agencies undertaken on the most advantageous terms.

Wholesale Depot for Sander & Son's Pure Volatile Eucalyptus Oil (Eucalyptol), and Importers of Oil of Eucalyptus

One thing at a time, Gentlemen.



This week we ask every Chemist who keeps Guy's Tonic in stock to do us a favour. We hold a large number of letters from patients who, through taking Guy's Tonic, have derived speedy benefit and permanent cure from obstinate Indigestion, Sluggish Liver, and Nervousness. One of the most impressive letters ever received by us was forwarded on by the courtesy of a firm of Chemists in the Midlands from one of their customers who had been quickly restored to perfect health. We wish to add to our Book of Evidence as to the merits of our medicine, and we invite our kind supporters to advise us if they have heard of similar successes. If you will add your own opinion as to the curative value and saleability of Guy's Tonic, we shall be very grateful for your interest.

GUY'S TONIC COMPANY, 4 Ludgate Circus, London, E.C.

W. EDWARDS & SON,

157 QUEEN VICTORIA STREET, LONDON,

WHOLESALE AND EXPORT DEALERS IN

Patent Medicines and Proprietary Articles,

ENGLISH, AMERICAN, FRENCH, &c.

SOLE AGENTS for ROCHE'S HERBAL EMBROCATION,

Burchell's Ancyne Necklaces, Ford's Balsam of Horehound, Widow Welch's Pills, by Mrs. Smithers, Oxley's Essence Ginger, and the preparations of Messrs. Hudson & Son, late of the Haymarket, London.

PRICE LISTS SENT ON APPLICATION. ORDERS CAREFULLY AND PROMPTLY EXECUTED.

BARRON, HARVEYS & CO,

GILTSPUR STREET, LONDON, E.C.

Beg to inform their friends and the Trade generally that, having purchased the Business of

BARRON, SQUIRE & CO., BUSH LANE,

and also the various Formulæ of the Special Preparations of

JAMES BASS & SONS, HATTON GARDEN,

they are prepared to execute orders for the same, and pledge themselves to supply them in all their integrity.

Specimens of these Preparations have remained in the Museum of Kew Gardens during 28 years without deterioration.

JOHN SANGER & SONS

Patent Medicine Vendors,
DEALERS IN
DRUGGISTS' SUNDRIES,



LOZENGES,
Mineral Waters, Perfumery
And TOILET REQUISITES.

**BRONCHITIS KETTLES,
CHEST PROTECTORS, RESPIRATORS,
AND OTHER
WINTER SPECIALITIES**

of the Best Quality at the Lowest Prices.

Illustrated Catalogue, also quotations for any of the above, sent post free upon receipt of Business Card

Warehouse and Show Room:

489 OXFORD STREET, LONDON, W.

SMITH & SONS

WHOLESALE DRUGGISTS AND MANUFACTURING CHEMISTS,
44, 46, and 48 MAGDALEN STREET, NORWICH.

PURE CHEMICALS.

MANUFACTURERS

NEW REMEDIES.

OF ALL

PHARMACEUTICAL

IMPORTERS OF ESS. LIMONIS

CRUDE DRUGS AND CHEMICALS.



PREPARATIONS.

SUPER AND ALL ESSENTIAL OILS,

DEALERS IN DRUGGISTS' SUNDRIES AND SURGICAL APPLIANCES.

PRICES CURRENT ON APPLICATION.

TELEGRAMS—"SMITH NORWICH."

MAGNESIA

CARBONATE, CALCINED, AND HYDRATE.

PURE FLUID MAGNESIA.

THE WASHINGTON CHEMICAL CO., WASHINGTON, COUNTY DURHAM, ENGLAND.

49

BARCLAY & SONS, LIMITED.

SEAMLESS ENEMAS.

RELIABLE QUALITY.

BEST ENAMELLED (Black only).

In Oval Cloth Boxes, complete, per doz. .. 33/-
In Cedar Boxes " " .. 29/-

BLACK SEAMLESS SHAPE

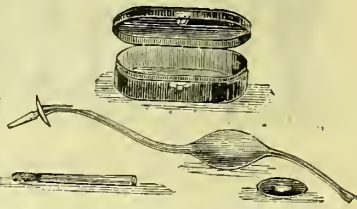
(Not Enamelled).

In Cedar Boxes, complete, per doz. .. 24/-

"HYGIENIC" ENEMAS

(Black), with Flexible Pipe.

In Oval Cloth Box, per doz. .. 30/-

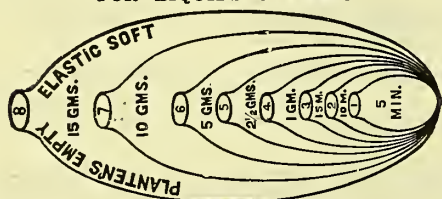


95 FARRINGTON ST., LONDON, E.C.

USE PLANTEN'S EMPTY GELATINE CAPSULES

FOR THE ADMINISTRATION OF NAUSEOUS MEDICINES
FREE FROM TASTE AND SMELL.

FOR LIQUIDS—8 SIZES.



PERFECT

AS REGARDS

SOLUBILITY,
ELASTICITY,

FINISH.

FOR POWDERS OR SOLIDS.

8 SIZES.

[2]



Order by **TOP No. only.**

Boxes 100 each.

From all Wholesale Houses, or direct from the **SOLE AGENTS—**

C. E. MASON & CO., 2 Beech Street, LONDON, E.C.

CHOLERA!!!

SPECIAL PRECAUTIONS.

1. Water should be boiled and allowed to cool in covered vessels before being filtered.

2. Every drop of water for drinking or cooking should be passed through one of Mawson's Filters which has been recently recharged.

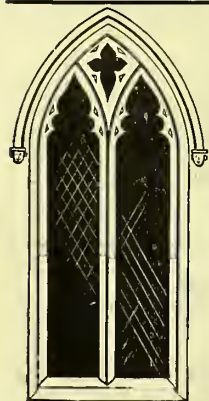
3. An old-fashioned or doubtful filter is worse than useless.

4. Mawson's Reliable and Scientific Filters may be obtained from all Wholesale Houses.

Full Information, Terms, and Prices from

MAWSON, SWAN & WEDELL, NEWCASTLE-ON-TYNE.

DR. BOW'S LINIMENT.



Of late a spurious article has been offered for sale, put up in imitation of the genuine one, even to copying the Pamphlet, Wrapper, and Labels. To protect the public from, and facilitate proceedings against, such frauds, the Proprietor has registered the Trade Mark here shown, a reduced copy of which will be found on the outside label on every bottle put up after this date. As a further security, the name "**DR. BOW'S LINIMENT**" (also a trade mark) appears in the Government Stamp.

BARCLAY & SONS, LIMITED, LONDON
RAIMES, CLARK & CO., EDINBURGH & YORK

} For the Proprietor,
December 1st, 1891.

SECOND SEASON.**FURFELT***Solport Bros.***SOLPORT'S****"FURFELT"****FURFELT***Solport Bros.***CHEST PROTECTORS.**

Made from the Softest Natural Undyed Lamb's Wool incorporated with the Fur of the Grey Coney,
and adjudged by the Trade and its press to be

"AN IDEAL CHEST PROTECTOR."**PRICES:—**

	No. 0	1	2	3	4	5	6
Single ...	5/6	6/6	9/-	12/-	15/6	20/-	25/- per doz.
Double ...	12/-	15/-	20/-	25/6	34/-	42/6	52/- "
Vest Shape...	16/6	22/6	30/-	37/6	46/6	58/6	70/- "

FURFELT*Solport Bros.***SOLPORT BROS.**

66 Shaftesbury St., New North Road,

LONDON, N.**FURFELT***Solport Bros.***AND OF ALL WHOLESALE HOUSES.**

CLARKE'S
WORLD FAMED
BLOOD MIXTURE
THE GREAT
BLOOD PURIFIER.

"CLARKE'S BLOOD MIXTURE is ENTIRELY FREE from any POISON or metallic impregnation, does not contain ANY INJURIOUS INGREDIENT, and is a good, safe, and useful medicine."

ALFRED SWAINE TAYLOR, M.D., F.R.S.,
Lecturer on
Medical Jurisprudence and Toxicology.

Counter Bills and Posters, with Name and Address, also Show Cards, on application. Printed matter supplied in any Language for Foreign Agents.

CAUTION.—Immediate proceedings will be taken against all persons pirating the Trade Mark, "Blood Mixture" (Registered No. 3,275), Labels Wrappers, Bills, or Advertisements, or in any way infringing the rights of the Sole Proprietors,

THE LINCOLN & MIDLAND COUNTIES DRUG CO., LINCOLN, ENGLAND.**KREAT - HALVIVA****The New Substitute for Quinine.**

**REDUCES TEMPERATURE, SUPPRESSES INFLUENZA,
SEA-SICKNESS, &c. CURES INDIGESTION.**

One size only for Public use, for sale at 2s. 9d. a bottle.

One size only for Dispensing, 10-oz. Stoppered Flats.

SPARKLING HALVIVA for sale at 5s. a dozen.

HALVIVA COMPANY, 4 Temple Chambers, LONDON.**Trade Mark.****Registered.****THE**

ASSOCIATION for the SUPPLY of PURE VACCINE LYMPH
12 PALL MALL EAST, LONDON, S.W.

SOLE AGENTS FOR**DR. WARLOMONT'S CALF VACCINE.**

Tubes, 2s. each; Half Tubes, 1s. each. Pomade in vials, 5s.

HUMAN VACCINE, from healthy children only, microscopically examined and as noted. Tubes two-thirds full, 1s. 8d. each; Tubes one-third full 1s. each; Tubes two-thirds full (same as those mentioned above, but without serum), in quantities for export, £5 per 100 Tubes. Pin-points uncharged, 1s. per dozen. Vaccine Ejectors, 1s. 3d. each, including postage. P.O.O.s (including postage, and crossed London and Westminster Bank) with orders payable to

EDWARD DAREF, Secretary.

Office hours, 10 to 4. Saturdays 10 to 2.

DR. LALOR'S PHOSPHODYNE

For THIRTY YEARS has maintained its world-wide reputation as

THE ONLY SAFE RELIABLE PHOSPHORIC CURE for Brain Wreckage, Paralysis, Sleeplessness, Harassing Dreams, and all Functional and Diseased Conditions of the System dependent upon the Deficiency of the Vital Forces.

DR. LALOR'S PHOSPHODYNE

HAS THE LARGEST SALE OF ANY PHOSPHORIC MEDICINE IN THE WORLD.

The only Medicine of the kind or name awarded a Certificate of Merit at the Calcutta Exhibition, 1883-4.

TRADE MARK—"PHOSPHODYNE."

THOUSANDS of unimpeachable Testimonials from all parts of the World. No other Phosphoric Preparation has received such exalted praise and distinguished recognition.

Sold in Bottles at 4s. 6d. and 11s. by all Chemists throughout the World.

MANUFACTURED ONLY AT

DR. LALOR'S PHOSPHODYNE

**LABORATORY,
HAMPSTEAD, LONDON, N.W.**

CHEMISTS enclosing Trade Card will be supplied free with a neat Pamphlet for Counter, &c.

WINTER SEASON, 1892-3.

FAMILY REFERENCE ALMANACK 1893.

Chemists may be supplied with the above popular Annual with their names, &c., on the cover, free of charge, on writing to Messrs. KAY BROTHERS LIMITED, and undertaking their distribution from house to house as soon as received. Also 1,000 bills for counter use, with name and address, if asked for. Enclose two (2) labels for correct address, with population of the district and best means of conveyance, under cover (labels on post-cards being contrary to regulations), addressed "Advertisement Department," at earliest convenience. The Almanacks will be sent direct from the printer, with counter bills, show-cards, &c., if required.

TRADE MARK **"COAGULINE"** MARK.

Kay's New Transparent Cement for Broken Articles.

"Clear as Crystal," "Stronger than Glass," "Tough as Leather," 6d., 1s., 2s., in Boxes, or on Cards. Show-cards, Handbills, with name, &c. Specimens, &c., for home, or export, free.

KAY'S COMPOUND

Essence of Linseed, Aniseed, Senega, Squill, Tolu, &c.
9½d., 13½d., 2s. 9d., &c.

KAY BROTHERS LIMITED.

LABORATORY AND WORKS:

ST. PETERSGATE MILLS. STOCKPORT.



THE INHALANT

"SPIRONE"

TRADE MARK.

FOR THE TREATMENT AND CURE OF ALL

DISEASES OF THE LUNGS, WINDPIPE, NOSE & THROAT.

CLAIMS TO BE A

Specific for all Congestive and Inflammatory Conditions of the Respiratory Apparatus, And will be found efficacious in

INFLUENZA, COUGHS AND COLDS, ASTHMA, BRONCHITIS,

Inflammation and Congestion of the Lungs, Pneumonia, Pleurisy, Whooping Cough. Croup, Diphtheria, Pharyngitis, Laryngitis, Catarrh, Sore Throat, Quinsy, Enlarged Tonsils, Hoarseness, Loss of Voice, Colds in the Head, Hay Fever, and all other Complaints of the Respiratory Organs.

None Genuine except such as bear the above Trade Mark "SPIRONE" and the Signature of the Inventor upon the Bottles, on the Label over the Cork, and on the Wrapper.

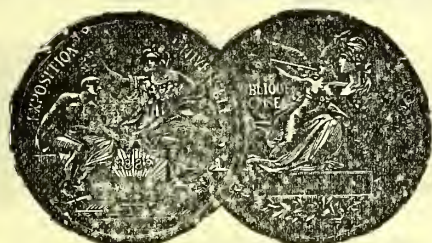
Retail Price, 4s. 6d. and 11s. per Bottle. Set of Apparatus for Administration, 15s.

PAMPHLETS AND SHOWCARDS FREE ON APPLICATION.

THE SPIRONE COMPANY, LIM., **DEPOT—**
285 REGENT STREET, **LONDON, W.**

PARIS EXHIBITION, 1889.

PRIZE MEDAL AWARDED TO



"SALVO PETROLIA"

Absolutely Genuine Paraffinum Mollis of the very Purest Form, and we claim that it is superior to Vaseline.

Manufactured by the Proprietors in Five distinct qualities—
WHITE, LEMON, YELLOW, GOLDEN, AND VETERINARY.
PACKED IN TINS, 1, 5, 10, 14, 28, 56, and 112 lbs. Also in 3-cwt. Cases.

"OLEUM DEELINÆ"

(REGISTERED).

UNIVERSALLY ADOPTED BY THE MEDICAL PROFESSION FOR
OPHTHALMIA, SCURVY, RINGWORM, ECZEMA,
AND ALL SKIN-DISEASES.

For External and Internal Irritation of every kind.

PACKED IN CASES—

One Doz. 1s. 6d. Bottles; One Doz. 2s. 6d. Bottles.
Pint Bottles, 4s. 6d. each, for Hospitals and Dispensing
Chemists.

TESTIMONIALS MAY BE HAD UPON APPLICATION.

"Edible Salvo Petrolia"

For Public Speakers, Actors, and Singers
1s. 6d. per Tube.

The above are Manufactured Solely by the Proprietors,

THE DEE OIL COMPY.

LIMITED.

Works—SALTNEY, CHESTER.

OFFICES—

LONDON—38 LEADENHALL ST., E.C.

Liverpool, Dublin, Manchester, Glasgow, Hull, Cardiff,
Bristol, Belfast, Barrow-in-Furness, Nottingham,
Paris, Hamburg, &c.

CUMMINGS'

TRADE



MARK

CYGNET BRAND EUCALYPTUS OIL,

Distilled from the leaves of Eucalyptus CNEORIFOLIA, formerly considered a sub-variety of *E. Oleosa*, but now classed as a distinct variety.

The Trade are invited to test this carefully prepared Oil, which since its recent introduction from Australia has won the unqualified approval of the leading British, American, and Continental Authorities.

Its purity, pleasant perfume, the unprecedentedly large percentage of crystallizable Eucalyptol it contains, and other good qualities, are deservedly gaining the preference of buyers.

Samples and Quotations on Application.

Sole Consignees—Wholesale only—

J. W. DRYSDALE & CO.

8 CREECHURCH LANE, LONDON, E.C.

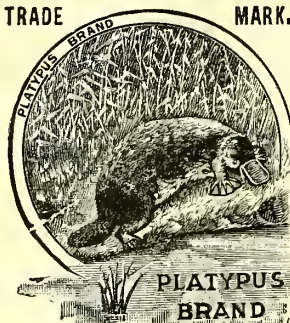
TASMANIAN EUCALYPTUS OIL COMPANY.

TRADE

MARK.

Obtained
First Award
and
Gold Medal

1891-92.



at the
Tasmanian
Exhibition.

1891-92.

DISTILLERS OF ABSOLUTELY PURE

OIL OF EUCALYPTUS GLOBULUS

(AND EXTRACT)

From the leaves of the Eucalyptus Globulus or Native
"Blue Gum" Tree of Tasmania. Pure, fragrant, and of
highest medicinal value.

Prepared at the Company's Tasmanian Factories.

For samples and prices apply at the

LONDON OFFICES—

138 Leadenhall Street, E.C.

Telegraphic Address—"Eucalyptus London."

MRS. WINSLOW'S SOOTHING SYRUP

FOR CHILDREN TEETHING,

Greatly facilitates the process of Teething, by softening the gums, reducing all inflammation; will allay ALL PAIN and spasmodic action, and is

SURE TO REGULATE THE BOWELS.

Depend upon it, Mothers, it will give rest to yourselves, and

RELIEF & HEALTH TO YOUR INFANTS.

Mrs. WINSLOW'S SOOTHING SYRUP


Has been used for over Fifty Years by Millions of Mothers for their children while teething with perfect success. It soothes the child, softens the gums, allays all pain, cures wind colic, and is the best remedy for diarrhoea.

MRS. WINSLOW'S ALMANACKS FOR 1893, WITH COUNTER BILLS & SHOWCARDS,

Sent Free of Charge, on application to

33 FARRINGDON ROAD, LONDON.


BROWN'S BRONCHIAL TROCHES

 CURE COUGH, COLD, HOARSENESS, AND INFLUENZA. CURE ANY IRRITATION OR SORENESS OF THE THROAT. RELIEVE THE HACKING COUGH IN CONSUMPTION. RELIEVE BRONCHITIS, ASTHMA, AND CATARRH. CLEAR AND GIVE STRENGTH TO THE VOICE OF SINGERS, AND ARE INDISPENSABLE TO PUBLIC SPEAKERS. SOOTHING AND SIMPLE, CHILDREN CAN USE THEM, AS THEY ASSIST EXPECTORATIONS AND RELIEVE HOARSENESS.

NOTICE.— Brown's Bronchial Troches are guaranteed to contain no Opium or other Poison.

London Office — 33 FARRINGDON ROAD.

THE MEXICAN HAIR RENEWER

 Prevents the Hair from Falling Off.

Restores Grey or White Hair to its ORIGINAL COLOUR.

Being delicately perfumed, it leaves no unpleasant odour.

IS NOT a Dye, and therefore does not stain the skin, or even white linen.

Should be in every house where a HAIR RENEWER is needed.

ASK YOUR CHEMIST OR
HAIRDRESSER FOR

THE MEXICAN HAIR RENEWER,

Price 3/6 per Large Bottle. Prepared only by

THE ANGLO-AMERICAN DRUG COMPANY, LIM.

33 FARRINGDON ROAD, LONDON, E.C.

MONROE'S ELECTRIC SOLES

ORIGINAL AND ONLY GENUINE.

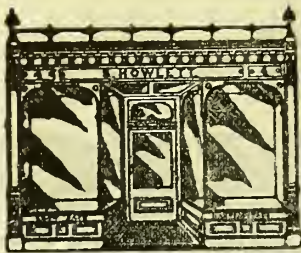
Chemists are particularly requested to go through their Stock, and send their Orders on early, as owing to the large increase in Sales each Season, orders sent later on in the year are liable to delay.

PRICE 4/- PER DOZ. PAIRS

Can be obtained from all Wholesale Houses, both at home and abroad.

Any Chemist who has not yet gone in for them can have One Doz. Pairs sent Post Free in Counter Case, by forwarding Postal Order for 4s., to

AYRTON & SAUNDERS
149 Duke Street, LIVERPOOL.

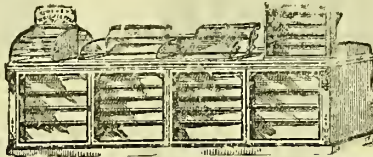


ESTABLISHED 1830.
S. HOWLETT,
 MEDICAL AND
GENERAL SHOP FITTER.
 Shop-Front Builder and Show-Case Maker.
 EXPORT ORDERS CAREFULLY PACKED AND SHIPPED.



SHOPS FITTED by Contract, in Town or Country, with every requisite, on the most improved principles, and at lowest prices.

NUMEROUS REFERENCES may be obtained of Leading Chemists in all parts of the Kingdom.



A LARGE STOCK of New and Second-hand Fittings and Cases to be sold very CHEAP.
 CABINET FITTER to the Pharmaceutical Society of Great Britain.
 PLANS and ESTIMATES SUPPLIED.

Manufactory and Showrooms—4 Lindley St., Sidney St., Mile End Road, LONDON, E.

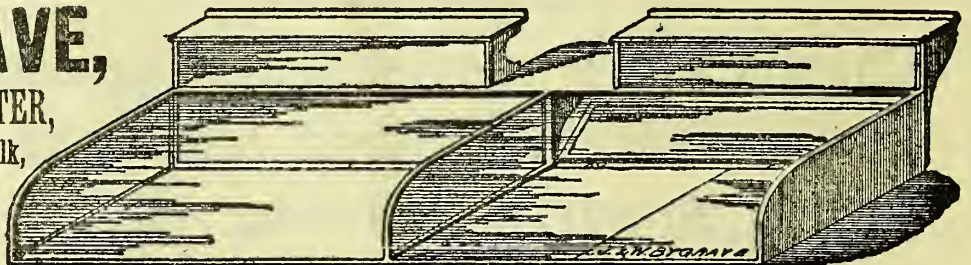
BYGRAVE,

SHOP FITTER,

111 Shepherdess Walk,

CITY ROAD,

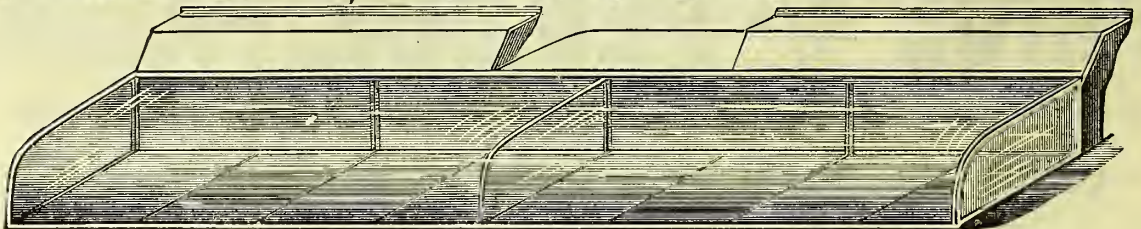
LONDON, N.



Bent-top plate-glass Counter Showcase, in French polished mahogany, or ebonized, with two upright mirror plate-glass fronted shelves, and table in centre for serving over, and mahogany falls at back lined with mirror plate glass, inside fitted with crimson velvet trays— if 5 ft. long, 18 in. wide, 8 in. high (total height 13 in.), £5 10s.; 5 per cent. off for cash.

ONLY ADDRESS—NO CONNECTION WITH ANY OTHER HOUSE.

ELKANAH NATALI, SHOP FITTER & GLASS CASE MAKER.



Mahogany and Plate-glass Counter Case, sloping and flat shelf at back, 12 inches high to top of shelf, fitted inside with velvet-lined trays and silvered glass back. 5 feet long, £5; 6 feet long, £5 10s.; 8 feet long, £7.

242 OLD STREET (12 doors from City Road). Works: HENSON STREET.
 ESTABLISHED 20 YEARS.

1ST-CLASS-PRIZE
EXCELLENCE-IN-DESIGN

MANUFACTURER OF A SUPERIOR
 KIND OF FITTINGS
 FOR SHOPS, SHOW-ROOMS
 AND OFFICES

BOWLING & GOVIER

PLANS & ESTIMATES
 FOR ALTERATIONS
 NEW SHOP-FRONTS
 AND FITTINGS

SHOP FITTINGS & SHOW CASES

ARCHITECTURAL
 AND ARTISTIC
 WOOD WORK

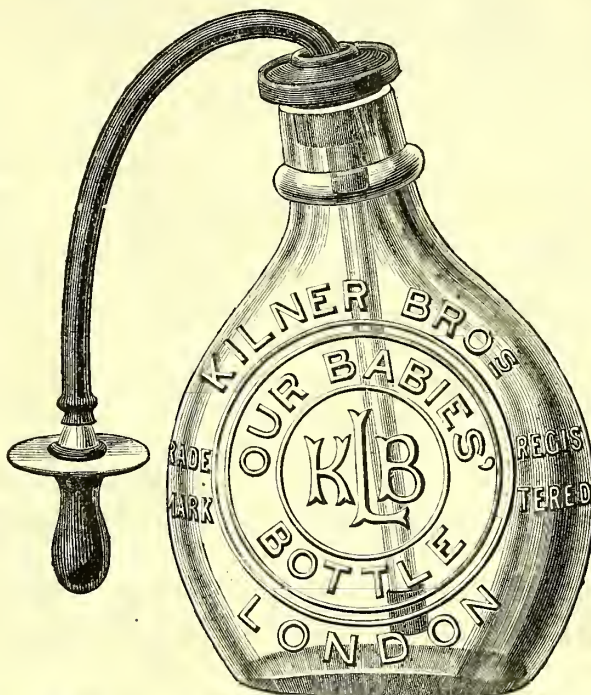
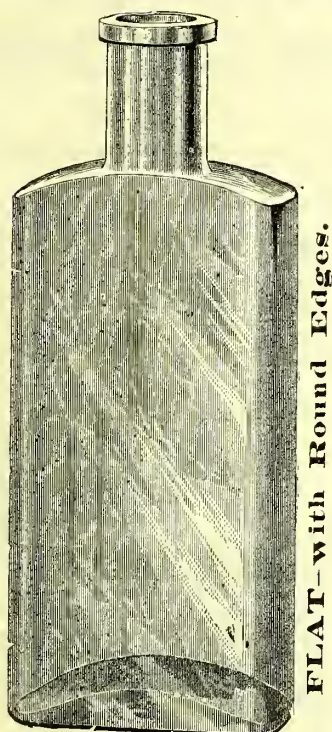
SHOW-ROOMS & FACTORY

GUN ST
 BRUSHFIELD ST
 BISHOPSGATE
 N.E.

A LARGE ASSORTMENT
 OF SHOW CASES &
 ALWAYS IN STOCK

HONORABLE MENTION
SUPERIOR FINISH

GLASS BOTTLES



ALL SHAPES, SIZES, AND COLOURS

DISPENSING BOTTLES.

Green Flint—Flats (ordinary and round edges), Ovals, Direct Squares, Rounds and Octagons.

	3	4	6	8	12 oz.
Ordinary quality ...	8/-	8/-	9/-	9/-	13/3 per gro.
Best " ...	10/-	10/-	11/6	11/6	16/9 "
Screw Stopped } Washed & Fitted }	10/9	10/9	11/9	11/9	17/6 "

White Vials, plain and graduated.

	½	1	1½	2	3	4 oz.
Ordinary quality ...	3/6	3/9	4/6	5/3	6/9	8/- per gro.
Best " ...	4/6	4/9	6/-	6/9	8/9	10/- "

FEEDING BOTTLES.

No. 64-inch Rubber Tube. Small lots. 2-grs. lots.

1.—Green Bottles, Boxwood Top Corks, White Fittings	25/6	24/6
3.—Ditto, Black Fittings	28/6	27/6
White glass 2/6 per gross extra. China tops 1/6 per gross extra.		
64.—Green Bottles, Glass Screw Stoppers, White Fittings	31/-	30/-
66.—Ditto, Black Fittings	34/-	33/-
White Glass 3/- per gross extra.		

per gross.

These prices include 1 doz. partitioned Wood Boxes. If Bottles are loose 2/- per gross less.
Supplied each Bottle in Cardboard Box at 4/6 per gross extra.

SPECIAL QUOTATIONS TO LARGE BUYERS.

Revised Price List (Illustrated), containing full particulars of above and many other kinds, sent on application to

KILNER BROTHERS,

No. 3 GREAT NORTHERN GOODS STATION, KING'S CROSS, LONDON.



EXTRA HEAVY OVAL GLYCERINES.
Example: 4-oz. size, at 0.13 3 oz. liq.
content.

PANELLED FLATS.

Telegraphic Address—"Fish London."

Telephone 1365.

IN STOCK IN TINTED & WHITE FLINT GLASS.

DELIVERED DIRECT FROM WORKS IN
FINEST AMBER TINT
AT SAME PRICES AS FOR WHITE GLASS.

JOHNSON & JÖRGENSEN.

OFFICE AND SHOW ROOM—

5 Savage Gardens, Tower Hill, E.C.

Warehouse—WEST INDIA IMPORT DOCK, E.

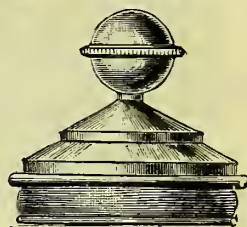


NEW PATENT AIR-TIGHT CHEMIST JAR.

A slight turn of the knob presses the indiarubber Band against the glass, and renders the vessel absolutely air-tight. The Stopper is made of pure Nickel, of handsome shape.

INVALUABLE FOR SHOW BOTTLES, CHEMISTS, CONFECTIONERS, &c.

Samples and Prices of all Chemists' Sundriesmen.



Section of the Nickel Stopper when closed.

C. MELIN,

[2]

37 CRUTCHED FRIARS, MARK LANE. E.C.

DISPENSING BOTTLES.

WEST LONDON DEPOT.

ESTABLISHED 1830.

Wholesale Merchants,

AND

CHEAPEST HOUSE IN LONDON.

JOHN P. BARRADELL & CO.

16 Paddington Green, LONDON, W.

PRICES ON APPLICATION.

GLASS BOTTLES

GOOD AND CHEAP.

From Stock
in London or
direct from
the Works.

THE NEW SHAPE FLATS,

with Rounded Edges; or the Ordinary Shape.

6 and 8 oz. 8/6 per gross.

3 and 4 oz. 7/6 "

Plain or Graduated.

These are highly recommended.

THE NEW SHAPE FLATS,

with Rounded Edges; or the Ordinary Shape.

Very Superior Quality. Crystal-blue Tinted.

6 and 8 oz. 10/- per gross.

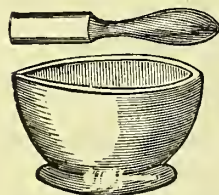
3 and 4 oz. 9/- "

Plain or Graduated.

I. ISAACS & CO., Glass Bottle Manufacturers,

25 Faneuil St., Tottenham Court Rd., LONDON, W.C.

Established 50 Years. Bankers—London and Westminster Bank.



WEDGWOOD ACID-PROOF MORTARS AND PESTLES.

ALSO MANUFACTURERS OF

Funnels, Evaporating Pans, Electric Battery Fittings, Bed Pans, Urinals, Medicine Spoons, Physic Cups, Sick Feeders, Bleeding Basins, Medicine Measures, Eye Cup, Inhalers, Nursery Lamps, Wall Tiles, &c.

PRICE LIST ON APPLICATION. SPECIAL QUOTATIONS FOR LARGE ORDERS.

Any Article not bearing the Stamped Trade Mark "WEDGWOOD" is not made by us.

JOSIAH WEDGWOOD & SONS, ETRURIA, STOKE-ON-TRENT.

London Rooms—ST. ANDREW'S BUILDINGS, HOLBOEN CIRCUS.

HAMBRO SPECKLED



TRADE MARK
REGISTERED.

All Orders by Post receive immediate attention.

LEECHES!

Warranted Healthy.

Wholesale and for Exportation
Direct from Marshes.

FITCH & NOTTINGHAM,

LEECH BREEDERS,

4 CANONBURY SQUARE, LONDON, N.

SPONGE IMPORTERS.

M. PETERSON & CO.

(ESTABLISHED 1870)

75 ST. ANNE STREET, LIVERPOOL.

FOR HOME, FOREIGN, & COLONIAL MARKETS.

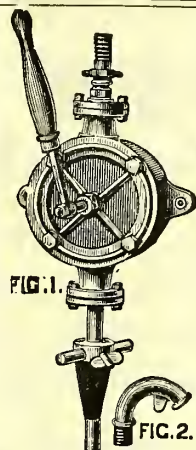
TANGYES' GAS ENGINE

'OTTO' PRINCIPLE. PINKNEY'S PATENTS

SINGLE ENGINES OF ALL SIZES FROM

 $\frac{1}{4}$ TO 146 ACTUAL OR 170 INDICATED HORSE-POWER

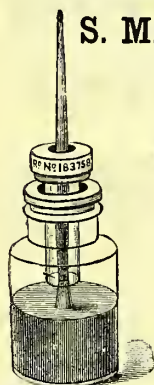
APPLY FOR ILLUSTRATED CATALOGUE TO

TANGYES LIMITED, BIRMINGHAMLondon, Newcastle, Manchester, Glasgow, Sydney, Melbourne,
Johannesburg, Genoa, Bilbao, and Rotterdam.**BUY THE BEST
OIL
PUMP**

AND SAVE

OIL, TIME, MONEY.**THOUSANDS IN USE.**Write for full particulars and prices of The
"Farrington" Patent Oil Pumps to**PONTIFEX & WOOD, LD.**
Shoe Lane, LONDON, E.C.**THE
BERKEFELD - NORDTMAYER FILTER.***THE LANCET*, September 12, 1891:—
"We have put the Berkefeld Filter
through many rigid tests; we have not
obtained the slightest evidence which
would enable us to contest any of the
statements made in regard to this filter."**ADVANTAGES.****Rapid, Perfect, and Permanent
Filtration.****Easy Cleaning and Sterilization
All Descriptions Supplied.**

See Illustrated 4-page Circular, Jan. 30.

THE BERKEFELD FILTER CO., 121 OXFORD ST., LONDON, W.
LOCAL AGENTS APPOINTED.**S. MAW, SON & THOMPSON'S
No. 11****GUM BOTTLE**

(REGISTERED NUMBER 183758),

*Fitted with Brush complete.*IN $\frac{1}{2}$ DOZEN AND 1 DOZEN BOXES,
8/- PER DOZEN.**S. MAW, SON & THOMPSON, LONDON.****BOXES**
ESTABLISHED 1839
ES**ROUND, OVAL, SQUARE, or FOLDING, for the
DRUG, DRYSALTRY, AND CONFECTIONERY TRADES.****LABELS, WHEN PRINTED TO OUR INSTRUCTIONS, WE PUT ON PILL
AND OTHER BOXES FREE OF CHARGE.****BOXES AND CASES FOR**Baking Powder, Black Lead, Bottles, Camphor Ball, Capsules, Castor Oil, Cough Lozenges, Dispensing Powder, Eye
Ointment, Fancy Boxes, Fuller's Earth, Folding Boxes, Glass Top Outers, Homeopathic Bottles, Insect Powders, Ink
Cases, Jewellery, Lozenge, Lip Salve, Magnesia, Metal Paste, Marking Ink, Nipple Shields, Night Lights, Parcel Post,
Pastilles, Pills, Potash Tablets, Plasters, Salt Lemon, Seidlitz Powder, Starch Gloss, Soaps, Soda Powder, Syringes,
Tapers, Tooth Powder, Violet Powder, &c.**ROBINSON & SONS, WHEATBRIDGE MILL & CHESTERFIELD.**
HOLMBROOK WORKS,

And 55 FANN STREET, ALDERSGATE STREET, LONDON.

THE "STIPENDUM" STOPPER CO., LIM.

47 LAMB'S CONDUIT STREET, LONDON, W.C.,

Manufacture the following Specialities—

- "STIPENDUM" CORK STOPPERS, in all sizes.
- "STIPENDUM" CORK-LINED CAPS, for Pomade Bottles.
- "STIPENDUM" SCREW CAPS, for Pomade Bottles.
- "STIPENDUM" OPENERS, for Stoppered Aërated Water Bottles.

"STIPENDUM" GREASE-PROOF COVERED POTS

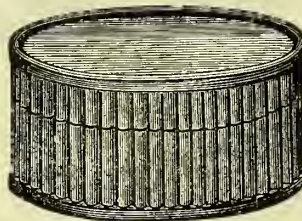
IN TERRA COTTA, CHOCOLATE, AND BLACK.

The Grease-Proof Covered Pots have perfectly fitting lids, are practically unbreakable, and the only article really answering the purpose intended.

The following Analytical Report should be noted by the trade:—

London, January 5, 1891.

"We have examined the two covered pots marked November 21, 1890, one containing strong nitrate of mercury ointment, and the other iodine ointment, the object being to discover—(1) Whether the ingredients of which the pots are composed have in any way affected the ointments; (2) Whether the pots have been deteriorated by the action of the ointments.



We hereby certify that no trace of any of the ingredients of the pot can be discovered in either of the ointments, and further that the pots themselves were found not to have been acted on at all; and we further consider 'Stipendum' admirably adapted for such pharmaceutical preparations.

Signed, C. T. KINGZETT, F.I.C., F.O.S.
(Ex Vice-President Society of Public Analysts)
R. H. HARLAND, F.I.C., F.O.S.
(Public Analyst)."

To be had of all Druggists' Sundriesmen.

Wholesale only of the Company.

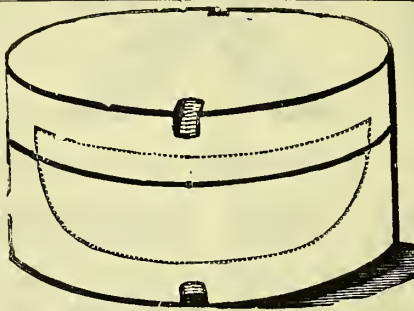
WILLIAM TOOGOOD

TOOGOOD'S

IMPROVED PATENT

EARTHENWARE COVERED POTS

Are claimed to be the most perfect and convenient yet offered to the Trade.



Owing to the increasing demand for our Patent Pots, we have introduced a Special THIN Series for Dispensing.

These Pots are beautifully glazed and finished, and, being very light, are specially adapted for sending by post.

ORDINARY THICKNESS—

1 dr.	2 dr.	3 dr.	4 dr.	1	1½	2	3	4	6	8 ounces.
1/8	1/6	1/6	1/8	1/10	2/-	2/3	2/10	3/6	4/6	5/6 per doz.

THIN FOR DISPENSING—

1/7	1/9	1/10	1/12	2/5	3/-	4/-	5/-	6/-	8 ounces.
									6/- per doz.

TOOGOOD'S BATHING CAPS.

Write for New Season's List.

TOOGOOD'S FLESH GLOVES.

Write for New Season's List.

TOOGOOD'S SPONGE BAGS.

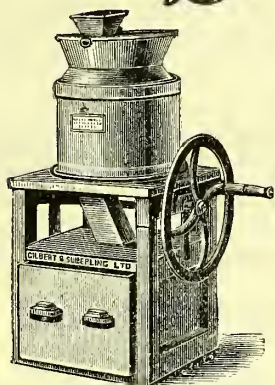
Write for New Season's List.

TOOGOOD'S INFANTS' TEETHING PADS.

Write for Special List.

BURLINGTON BUILDINGS, HEDDON ST., REGENT STREET, LONDON, W.

THE **DESIDERATUM MIXER** BRACHER'S PATENT



STANDS UNSURPASSED
AS THE
BEST MACHINE FOR CHEMISTS!

A FIRST-CLASS RECIPE FOR BAKING POWDER,
UNEQUALLED AS A PROPRIETARY ARTICLE,
IS GIVEN TO EVERY PURCHASER.

JOHN A. GILBERT & COMPANY,

SOLE PROPRIETORS AND MANUFACTURERS OF

The "BRACHER" PATENTS and other SPECIALITIES. The "GILBERT" MILLS, for Coffee, Spices, and Drugs. CANISTERS, BINS, &c., japanned and Ornamented in First-class Style.

➔ **4 MOUNT PLEASANT, GRAY'S INN RD., LONDON, W.C.**

PETROLEUM JELLY.

PARAFFINUM MOLLE, B.P.

(PIONEER BRAND) Registered Trade Mark.

Equal to and Cheaper than VASELINE.

FOR MEDICAL AND PHARMACEUTICAL PURPOSES.

White, Yellow, Veterinary, and Waterproof. All kinds put up in 1-lb., 5-lb., 7-lb., 14-lb., 28-lb., and 56-lb. Patent Tins, and in 300-lb. Barrels.

Pure Castor Oil, Cod Liver Oil, White Mineral Oil, Best Eating Olive Oil, Pale and Crude Carbolic Acid, Carbolic Powders, Sheep Dip, Benzine 50 per cent. and 90 per cent., Crude and Rectified Spirits of Tar, Stockholm Tar, Camphor Ice, Carbon Candles.

PATENT

CARBOLIZED PEAT,

THE NEW AND POPULAR DISINFECTING POWDER.

SEND FOR SAMPLES AND PRICES TO

GRINDLEY & CO., Lim., POPLAR, LONDON, E.

(ESTABLISHED 1868.)

HORN & SON

OFFICES FOR BRITISH AND FOREIGN

PATENTS AND TRADE MARKS,
SOMERSET CHAMBERS, 151 STRAND, LONDON
(NEXT TO SOMERSET HOUSE).
Guide to New Patent Law and Registration gratis.

HAND-PICKED GUM ARABIC.

Wholesale and Export Druggists before buying elsewhere
should apply to

FREDK. FINK & CO.

10 & 11 MINCING LANE, LONDON, E.C.

**MORISON'S PILLS,
POWDERS, AND OINTMENT.**

WHOLESALE—

33 EUSTON ROAD, LONDON.**BURNS EMBROCATION**

The favourite rubbing for Athletes, Cyclists, and Sportsmen.

1/1½, 2/9, and 4/6; 10/, 24/, and 40/- per dozen net.

Of all London Wholesale Houses, or direct from

H. BURN, 7 to 9 Gresham St., LONDON, E.C.

1 doz. 1/1½ sent carriage paid in United Kingdom for P.O. 10/.

A NOVEL IDEA. VERY PROFITABLE.**TOM BROOKS'S "SANOSCENT"**

Is a Solid Perfumed Disinfecting Tablet, retaining its virtue for years.
Exhales sweet, balmy odour. Eradicates Fleas and Moths. Each in a
Japanese Basket. Retail 2d., or 4 baskets in outer for 6d. Trade 12s. gross,
½ gross Carriage paid. Sample 2 doz.. Post Free, 2/-.

TOM BROOKS, CHEMIST, HORNSEY, LONDON, N.**INDIARUBBER STAMPS**

For all purposes and in all styles.

Self-Inking Stamps, as Illustration, from 2/ each.
Chemists' Prescription and Dating Stamp
of all kinds, Brass Seals for Wax, Stenella.
Dies, &c. Price and Pattern Sheets post free.

J. BERKLEY, 8 LIVERY ST., BIRMINGHAM

REGISTERED.

(2)

For Colds, Influenza,
Hay Fever,
Catarrh, &c.

Of all Wholesale Houses, or
direct from Sole English
Depot,

A. P. BUSH & CO.

1 Gresham Buildings

LONDON, E.C.

SHOWCARDS, &c., on
application.**PRECIPITATED CHALK, WHITEST AND
PUREST.**

CHEAPEST SELLERS IN THE MARKET.

ALSO CHEMICALS, DRUGS, AND OILS.

APPLY TO

AUG. LEVERMORE & CO., 8 LIME STREET, LONDON, E.C.

Wholesale Buyers should write for Terms and Samples of the Cheapest and
Best

GUTTA PERCHA OR METALLIC**TOOTH STOPPINGS**

Which are Manufactured by J. J. LAKEMAN, Dentist, LEYTONSTONE,
Maker of the MERMAID IMPRESSION COMPOSITION for Dentists
use, 3s. per lb., post free.

S. SAINSBURY'S

From English Lavender
Flowers, and most choice
and delicate Scents.

Lavender**176 & 177 STRAND, LONDON.**

Established 1839.

Wholesale and Shipping Terms on Application.

Water.

**BERNARD-
ESCOFFIER PILLS,
GRASSE,**
FOR
Oil of Almonds,
Perfumed Waters,
Lavenders, and all
Essential Oils.
**LONDON DEPOT—
LOUIS
SCHLESINGER,
WILSON ST.,
FINCHBURY
Importer of
MUSE, CIVET,
AMBERGRIS,
TONQUINOL,
OTTO DE ROSE,
and every
ESSENTIAL OIL.
Telegrams—
"AMBERGRIS LONDON."
Established 1864.**

THE "MORSTADT" Cachets

Are the most digestible, flexible, and elegant Cachets in the market, and
are fast replacing all competitors. The Cachets are made to hold from
3 to 18½ grains Quinine or Salicylic Acid.

"MORSTADT" CACHET CLOSING APPARATUS, to easily, cleanly,
and speedily close 12 Cachets at one operation, from 12s. to 30s.
SMALL APPARATUS, to fill and close 1 Cachet at a time, 2s. 6d. each.

THOMAS CHRISTY & CO., 25 Lime St., London, E.C.**ELKANAH NATALI,****SHOPFITTER and GLASS SHOW-CASE MAKER,**

Removed to more Extensive Premises,

242 OLD ST. (only address),

Twelve doors from City Road, nearly opposite the old place.

A Large Stock of New and Second-hand Cases, &c., always in hand. No con-

nection with any other house of the same name.

ESTABLISHED ABOUT QUARTER CENTURY.

HUDSON'S HALF-MINUTE THERMOMETER,

Inland Post Free, 3/6.

CLINICAL THERMOMETERS IN CASES,

25/- per dozen. Trade Discount.

For Medical Press Opinions apply

HUDSON & CO.

OPTICIANS, PATENTEES, AND MANUFACTURERS,

5 Crosby Square, LONDON, E.C.

**SOL. IODI.**

(DOWNES.)

This preparation is freely absorbed through the skin, and does not blister or colour
it, and is recommended for any of the uses for which Iodine is usually employed.

Prepared by **R. J. DOWNES, L.P.S.I.**Sole Wholesale Agents, **BROOKS & CO., 138 Lower Baggot St., Dublin.**

Kept in Stock in London by Messrs. HOOPER & CO., 7 Pall Mall East; Messrs.
ALLEN & HANBURY, Vere Street; Messrs. CORBYN & STACKY, New Bond Street;
and by Messrs. CLAY & ABRAHAM, Liverpool.

PUREST CHLOROFORM

Guaranteed free from all injurious impurities. The.
Purest in the World.

SEND FOR ANALYSIS AND TESTIMONIALS.

**SALAMON & CO., LD., CHEMICAL MANUFACTURERS,
RAINFHAM, ESSEX.**



E. H. THIELLAY'S (Registered 1867) MOUSQUETAIRE

A bright Fixing Liquid for the special training of the MOUSTACHE. Invaluable to Medical Men, repelling infectious miasma from the respiration. In Cases, with Bruis, Pom-Hungroise, &c. at 2/-, 3/6, 5/-, 7/6, &c.
Most successful Nostril, 2/- sample most free 15 stamps.

All Wholesale Houses, or direct from
E. H. THIELLAY,
Parfumeur-Chimiste, Amsterdam Park, New Cross, LONDON.
(SHOW ROOMS AT CHARING CROSS HOTEL.)

Fletcher's
Hydrobromates

Supplied in Original Bottles ready for Patient's use (stamped), to retail at 4/6 each; also in 1-lb. Bottles for Dispensing, by the Sole Manufacturers:-

Fletcher, Fletcher
& Stevenson,
21 Mincing Lane,
London, E.C.

PINCH & CO., MANUFACTURERS OF PATENT GOUT CURE

(For Outward Application Only).

In Bottles, 1s. 1/2d., 2s. 9d., and 4s. 6d. Wholesale and Export.

114 JAMAICA ROAD, LONDON, S.E.



DON'T MISS
NO. 4!
NOW READY.

Electrotypes

Advertising Novelties and List Blocks for all Trades
QUARTERLY, 3/4d. ANNUAL SUB., 1s. 2d.

174 FLEET STREET, E.C.



DENTAL.

Our business is to supply Teeth, Instruments, Tools, Gas Apparatus, and every requisite for Dental Practitioners; full value at bottom prices. Paragon Rubbers, best and cheapest, half-pound each, mailed free for 10/9, as sample. Springs and Swivels, 2/6 dozen sets. Send for them! Complete outfits. Enquiries invited. Prompt despatch.

ELLIOTT & CO., 30 Hanover St., EDINBURGH.

S.V.R.

In 40-gallon returnable iron casks, pure tinned, with screw bungs, interchangeable brass taps and spanners for opening. Farina, Dextrine, Glucose, Alcohol absolut., Fusel Oil, Pear Oil, Lime-Soda- Lead-Acetates, Verdigris, Acetic Acid, Wood Naphtha, Charcoal, Ammonia liquid 880-900, anhydrous Sodium Sulphide, Bromides, Iodides, Chloralhydrate, Boracic Acid Sulphate of Copper, Permanganate of Potash, Ol. Caryophyll., Menth. Pip., Pinl, Juniperi.

HUGO LORENZ, 7, 8 Idol Lane, LONDON, E.C.

See "Chemist and Druggist," July 30, 1892, page 110.

RAYBOULD'S FURNITURE POLISH

BRIGHTENS FURNITURE WITH LITTLE LABOUR.

In Tins—1d., 7/- gross. Stone Bottles—1d., 8/- gross; 3d., 2/- dozen; 6d., 4/- dozen; 1s., 7/- dozen. It is sure to please and increase your trade. Every Chemist should send for Sample order, 6 dozen assorted as required, Carriage Paid, P.O.O. or Cheque, payable to

FLESHER RAYBOULD, REFORM WORKS, DUDLEY.

DR. MACK'S COUGH ELIXIR.

Prepared only by J. McGEARY,
194 Camberwell Grove, LONDON, S.E.

NICHOLL'S BLOOD PILLS.

1/1 1/2 2/9 4/6

Wholesale of Messrs NEWBURY & SON, LYNCH & CO., BARCLAY & SONS, EDWARDS & SON, SANGER & SONS, HOVENLEN & SONS, London; Messrs. EVANS, Liverpool; Messrs. RAIMES & Co., York.

NICHOLL'S MEDICAL HALL, 25 HIGH STREET, BELFAST.

TO LET.

EADE'S GOUT and RHEUMATIC PILLS

Are the safest and most effectual remedy advertised for

GOUT, RHEUMATISM, AND ALL MUSCULAR PAINS.

GEORGE EADE, 72 GOSWELL RD., E.C.

Counter Bills and Show Cards on application.

Bromley's Gout & Rheumatic Pills
FREE Printing of Chemists' own Bills.
46 Sir Thomas's Buildings Liverpool, Eng.

Established 1867.
WILL CURE.

CHEAPEST.
MOST
PROFITABLE.

Not Sold under
Price on Box.

Send Hand-bill
or Labels.

ESCHMANN BROS. & WALSH,

Inventors and Manufacturers of the
SOFT SILK FLEXIBLE CATHETER, GUARANTEED WITH WOVEN EYES

To be had of all Surgical
Instrument Makers
and Wholesale Houses.



To be had of all Surgical
Instrument Makers
and Wholesale Houses

ST. DALMAS' LEICESTER
Improved Adhesive Plaster
ON FINE FLESH COLORED CAMBRIC

USED BY SURGEONS ALL
OVER THE WORLD.

"THE LEICESTER" SPREAD & MARGINAL PLASTERS,

POROUS PLASTERS,
MUSTARD PLASTER,
CORN PLASTERS,
COURT PLASTER, ETC.
BEST QUALITY.

FRANCIS' BRONCHIAL PROTECTOR.

REGISTERED TRADE MARK.
Best Preventive and Cure of Bronchitis, Asthma
Winter Cough, Tight Breathing, and all Throat
Complaints. 13/4d. and 2s. 9d.

MANUFACTURED BY

A. de ST. DALMAS & CO., LEICESTER.

S. V. METH.

JONES & COMPANY
COPPERFIELD ROAD
LONDON, E.
LARGEST MAKERS IN THE KINGDOM.

We are prepared to supply METHYLATED SPIRIT in 5-gallon quantities at Lowest Prices.

REDUCTIONS TO LARGE BUYERS.
SAMPLES FREE.

BOORD & SON,
DISTILLERS, FOREIGN WINE AND SPIRIT MERCHANTS, AND METHYLATORS,
ALLHALLOWS' LANE AND BARTHOLOMEW CLOSE, LONDON, E.C.
Quotations for **S.V.R.** Methylated Spirit and Finish on application.
FINEST ORANGE WINE FOR QUININE.

**JAMES
BURROUGH**

FINE PORT (without tannin)
FINE SHERRY (for Medicinal uses, &c.)
FINE MALAGA (for Steel Wine, &c.)
FINE BURGUNDY (for invalids)
S.V.R. and Methylated Spirit at lowest present prices.

CALE ST. DISTILLERY

*All at Lowest Prices and
specially recommended.*

CHELSEA

WILEY'S CHEMICAL ESSENCE

FOR

LAMENESS IN HORSES.

HANDBILLS, WITH NAME & ADDRESS, SUPPLIED GRATIS.
50 YEARS' UNBROKEN SUCCESS.

SOLE MAKER AND PROPRIETOR, FRANCIS E. ROOKLEDGE, CHEMIST, EASINGWOLD, YORK.
TO BE HAD OF USUAL WHOLESALE HOUSES.

AS A POLISH THE CLEANEST, BRIGHTEST, AND BEST.

PYN-KA

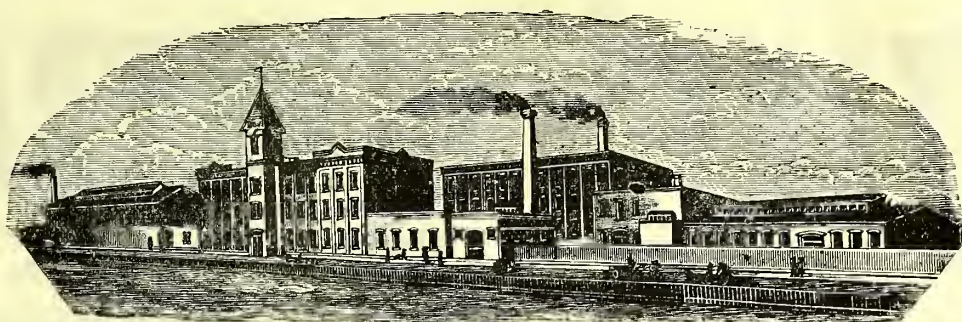
THE POLISHING TABLET (Unsurpassed). AWARDED GOLD MEDAL.

Gleams with a Brilliant Polish Brass, Copper, Silver, Gold, White and other Metal, Electroware, Glassware, and other domestic articles. For Restaurants, Hotels, Bars, and Bicyclists.

TESTIMONIAL FROM A LADY.—"Your 'PYN-KA' Sample is the best I have tried, and we shall use no other cleaning preparation in our house. It will, I am convinced, supersede all other Polishing Pastes."

For Wholesale Terms apply to
the Sole Vendors—

THE PYN-KA SYNDICATE, LIMITED, 41 LORD ST., LIVERPOOL.



SEABURY PHARMACAL LABORATORIES, EAST ORANGE, N.J.

SOLE PROPRIETORS

SEABURY & JOHNSON

(GEORGE J. SEABURY, G. W. HOPPING, ALFRED H. MASON).

WE ARE THE PIONEERS IN THE MANUFACTURE OF

Indiarubber Pharmacopœial Plasters

AND SURGICAL DRESSINGS.

We have no successors.

We have no "entangling alliances."

We do not supply the Wholesale Houses on sale or return; the increasing demand for our goods prevents the necessity for such business.

The highest proof of the position that has been justly earned by us is that we have received
FORTY-FIVE HIGHEST AWARDS over all American and European Competitors.
PURVEYORS TO THE ARMIES AND NAVIES OF SEVERAL NATIONS.

Our Goods may be obtained from any of the Wholesale Houses by specifying Seabury's, or from our warehouse in London, where we hold a complete stock.

SEABURY & JOHNSON,

46 Jewin Street, LONDON, E.C.

CONTRACTORS TO HER MAJESTY'S GOVERNMENT

WYLEYS LIMITED,

Manufacturing & Analytical Chemists,

**WHOLESALE & EXPORT DRUGGISTS,
COVENTRY.**

Warehouses, Laboratories, and Drug Mills, COVENTRY.

BRANCH HOUSE: 52 MOOR STREET, BIRMINGHAM.

MANUFACTURERS OF

PHARMACEUTICAL PREPARATIONS & SPECIALITIES,

PEARL & GELATINE COATED PILLS,

Compressed Pellets, Sugar-coated Pellets, Hypodermic Pellets & Cases

STANDARDIZED, CONCENTRATED, AND GLYCERINE TINCTURES,

HYPODERMIC SOLUTIONS,

CONCENTRATED INFUSIONS & DECOCTIONS

PATENT DURAPLASTIC COATED HORSE BALLS.

IMPORTERS OF FINE ESSENTIAL OILS.

New Drugs and Synthetic Remedies.

SPECIAL ATTENTION GIVEN TO SETTING-UP ORDERS.

WE SUPPLY ALL REQUISITES—DRUGS, PATENTS, & SUNDRIES.

COMPLETE PRICE LIST ON APPLICATION.